THE UNIVERSITY OF ALBERTA

NATURALNESS JUDGMENTS BY NATIVE FRENCH SPEAKERS FROM FRANCE AND CANADA ON THE POSITIONS OF THE FLOATING QUANTIFIER *TOUT*

By

© CHRISINA TANNOUS

A THESIS

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DEPARTMENT OF ROMANCE LANGUAGES

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled:

NATURALNESS JUDGMENTS OF NATIVE FRENCH SPEAKERS FROM FRANCE AND CANADA ON THE POSITIONS OF THE FLOATING QUANTIFIER *TOUT*

submitted by CHRISINA TANNOUS

in partial fulfilment of the requirements for the degree of

MASTER OF ARTS

in ROMANCE LINGUISTICS.

(Supervisor)

Date: June 18, 1986

to my parents

(and Kukla)

ABSTRACT

Native French speakers from France and Canada were asked to complete a questionnaire which examined the naturalness of the floating quantifier *tout* in the following positions: A) to the left of the noun phrase it modifies; B) between the auxiliary verb and the past participle; C) after the past participle but not in absolute final position; D) after the past participle in absolute final position; and E) after the past participle but before the preposition related to the indirect object. *Tout* was tested in these various positions when related to the subject with both transitive and intransitive verbs, and to the direct and indirect object. Comparisons were made between the naturalness judgments of the subjects from France and those from both Eastern and Western Canada. Sociolinguistic factors such as age, education, region and gender were also examined.

This experiment was conducted to offer empirical evidence to either support or refute claims made by Kayne for Standard French and Daoust-Blais and Lemieux-Niéger for the French in Quebec. According to Kayne, *tout* may occupy the same positions that an adverb may occupy when it relates to the subject of the sentence. When *tout* relates to a full object noun phrase, it may not be moved from its normal position which is to the left of the noun phrase it modifies. For the French in Quebec, *tout* may not follow the past participle when related to the subject of the sentence unless there is some sort of expansion. When *tout* is related to the object, it may be placed between the auxiliary verb and the past participle which is also possible when it is related to the subject. When it is related to the indirect object, it may precede the preposition related to the indirect object providing the verb is in a simple tense.

It was found that Standard French speakers find *tout* after the past participle but not in absolute final position fairly natural, while French Canadians do not. French Canadians will allow *tout* to be placed between the auxiliary verb and the past participle when it relates to the direct object, but not when it relates to the indirect object. *Tout* may not occupy all the positions that an adverb may potentially occupy. It is not, for example, natural in absolute final position after a compound tense verb. There are also other factors which seem to effect the naturalness of the position of *tout*, such as the transitivity of the verb.

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Chrisina Tannous

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I. INTRODUCTION

Linguists' descriptions of certain grammatical structures in a particular language are not always reflective of structures commonly used by linguistically naive native speakers of that language. The experiment reported in the following pages investigates the naturalness of various positions of the floating quantifier *tout*. The data collected were based on naturalness judgments made by native French speakers from France and Canada. The study was conducted to test empirically claims made by Kayne (1975) for 'Standard' French[1] and Daoust-Blais and Lemieux-Niéger (1979) for the French in Quebec. These linguists, as well as others such as Quicoli (1976) and Klein (1977), have proposed various grammars (transformational, phrase structure and a combination of the two) to describe the floating characteristic of *tout* in numerous types of syntactic structures. This study then compares its results to the hypotheses proposed for Standard French and the French in Quebec. It also offers empirical evidence as to those areas where Standard French and Canadian French differ, and the similarities between the French spoken in Eastern and Western Canada. The major portion of the experiment tests the position of *tout* in relationship to verbs in the passé composé. The experiment examines the rightward movement of *tous* (R-Tous) when related to a full, plural subject noun phrase (NP) with both intransitive and transitive verbs, and the leftward movement of *tout* (L-Tous) when related to a full object NP (both direct and indirect, singular and plural object NPs

[1]Standard French refers to the French spoken in France, and is not necessarily an indication of what is 'grammatically' correct according to grammarians or the French Academy.

were tested). There were some examples in which simple tense verbs were used, and cases where *tout* was moved from a main clause into a relative clause and vice versa.[2]

For Standard French (SF), Kayne states the following:

> . . . the quantifier *tous* (feminine:*toutes*) may occur as the leftmost element of a plural noun phrase (NP) as in *tous les garçons, toutes ces femmes, tous mes vieux livres*. In addition, when associated with a subject NP, *tous* may appear not only as part of that NP, but alternatively in one of a number of other positions in the sentence.
>
> (1) a. Les garçons sont tous partis à la guerre.
>
> b. Les garçons sont partis tous à la guerre.
>
> a-b. 'The boys have all gone to war.'
>
> The surface positions compatible with quantifiers moved from the subject are precisely those compatible with adverbs of various kinds.[3]

As for *tous* related to an object NP, Kayne states, "...the positioning of *tous* away from object position is not possible if the object is a full NP:

(2) *Elle a tous lu ces livres."[4]

Klein (1977) adds, "There are variations in the degree of acceptability, however, based on surface notions of "heaviness" of the quantifier (or adverb) involved." It is precisely this "degree of acceptability" or in this case "naturalness" that is being tested in this experiment.

---

[2]There were only a few examples where relative clauses and simple tense verbs were used. Thus, in these cases the results are not conclusive, but some general tendencies emerged.

[3]Kayne does not offer any examples of *tous* in absolute final position after a compound tense verb, as in *Les garçons sont partis tous*. He does offer an example of *tous* in absolute final position after a simple tense verb, *Les garçons partiront tous*. Since his statement is so general, that is *tous* could occupy any position that any adverb could occupy, it is assumed here that *tous* in absolute final position after a compound tense verb is possible since it would be possible for certain adverbs, as in *Les garçons sont partis vite*.

[4]Again Kayne does not offer any examples with indirect object NPs, but it is assumed here that this general rule applies to any full object NP whether a direct or an indirect object.

As for the French in Quebec, or more specifically in this experiment Canadian French (CF) since groups were tested from both Eastern and Western Canada, Daoust-Blais and Lemieux-Niéger make the following claims:

> /tUt/[5] lié à un SN sujet singulier ou pluriel peut être placé à gauche de ce SN, à droite du verbe simple et à droite de l'auxiliaire dans les verbes composés.
>
> (3) /tUt/ mes amis viendront.
>
> (4) Mes amis viendront /tUt/.
>
> (5) Mes amis sont /tUt/ venus.
>
> Avec le verbe composé, la position finale semble exclue, sauf s'il y a expansion.
>
> (6) *Mes amis sont venus /tUt/.
>
> (7) Mes amis sont venus /tUt/ hier.

For the quantifier related to the subject NP, the rules presented by Kayne for SF and those presented by Daoust-Blais and Lemieux-Niéger for CF seem basically the same, except that there is a specific statement for CF as to what is not possible, that is, the quantifier in absolute final position after a compound tense verb, which Kayne simply ignores. The main differences between SF and CF, however, appear when the quantifier is related to a full object NP. For CF, Daoust-Blais and Lemieux-Niéger make the following claim:

> En position objet le français du Québec, comme le français standard, fait une distinction entre le verbe simple et le verbe composé. Avec le verbe simple, /tUt/ se place obligatoirement devant le SN.
>
> (8) Les enfants mangent tous les gâteaux.
>
> Avec un verbe composé, /tUt/ se place soit devant le SN, soit à droite de l'auxiliaire, c'est-à-dire au même endroit que /tUt/ lié au sujet.
>
> (9) Les enfants ont /tUt/ mangé le gâteau.

---

[5]Daoust-Blais and Lemieux-Niéger use /tUt/ to represent all forms of the quantifier *tous* since for the French in Quebec this pronunciation is always possible regardless of the number or gender of the word.

Those rules apply to the direct object, while for the indirect object they state:

> Le comportement de /tUt/ lié à un SN objet indirect plein est le même, qu'il s'agisse de phrases contenant un verbe simple ou un verbe composé. /tUt/ peut se placer, soit devant le SN, soit à droite du verbe simple ou à droite de l'auxiliaire dans les phrases à verbes composés.

(10) Je pense à /tUt/ mon affaire.

(11) Je pense /tUt/ à mon affaire.

(12) J'ai parlé à /tUt/ mes voisins.

(13) J'ai /tUt/ parlé à mes voisins.

The displacement of the quantifier from object position in relative clauses was also touched upon briefly in this experiment. Although this was not part of the major portion of the study, it does offer an area for further investigation. The following type of construction is then possible:

(14) Les garçons qu'elle a tous connus sont morts.

(15) Les garçons qu'elle a connus sont tous morts.

This displacement is only possible where the quantifier remains in a clause where there is a referent to which the quantifier is related. In (14), this would be the relative pronoun, while in (15) it would be the full subject NP. Thus a sentence like (16) would not be possible.

(16) *C'est tous elle qui a tué les lièvres.[6]

The 'grammaticality' or the function of *tout* in a particular position is not being tested in this experiment. It is assumed that the 'function' of the quantifier is the same in each token, that is, it is related to a full NP whether in subject or object position. Grammarians themselves seem to disagree as to the "correct" label or grammatical nomenclature to use when describing the quantifier, not only when moved from its normal position

[6](16) was used in the questionnaire. It was taken from the film, Pris au collet, National Film Board of Canada, 1974. The main character spoke this line. It was tested to see what the subjects' reactions would be to such a sentence.

(which is to the left of the NP it modifies), but also in normal position. For example, in normal position, according to Andersson (1954, 108-09), Beyer views *tout*, "pas comme apposition, mais un adjectif prédicatif", while Tobler sees it as, "une apposition ou un complément adverbial", where others like Morf and Meyer-Lübke believe that *tout* started as an adverb, but due to a grammatical attraction began to agree in number and gender with the NP to which it was related, and thus was classified by some as an adjective.[7] In Chevalier (1964), it is called, "un déterminateur complémentif", while Grevisse (1964) simply calls it an adjective. When the quantifier is moved from its normal position, Grevisse calls it, "un adjectif indéfini détaché", while Hanse (1983) calls it, "un pronom indéfini". Both admit that there is strong disagreement among grammarians on this point.

Grammarians are also reluctant to offer examples of *tout* out of its normal position, and seem even more vague about exactly where the quantifier may be placed when it is moved. Andersson (112) states:

> . . . en ancien français la place de *tout* était assez libre. Dans le français classique et moderne, il se place par contre dans la grande majorité des cas, immédiatement devant le groupe <<déterminatif + substantif>>, mais bien des fois lorsqu'il se rapporte au sujet de la proposition, il se place surtout au pluriel, après le verbe.

"Après le verbe" is extremely vague and does not imply that there may be some restrictions. Grevisse simply states, "il (tout) est parfois détaché." This implies that it could be placed anywhere. Some descriptions offer examples of *tout* placed between the auxiliary verb and the past participle, as found in Andersson's, *Les candidats ont tous répondu.* or after a simple tense verb such as, *La ville brulait toute*. Andersson also states that when *tout* is moved, it is as an apposition. It is occupying another position to accentuate or emphasize the notion of *all* or *the whole*. The notion that it functions as an apposition is an important one. Anytime something is moved from its normal position, it is usually to draw attention to that idea; to stress or emphasize a particular point. For the

[7]Beyer, Tobler, Morf and Meyer-Lübke are quoted in Andersson (1954, 108-09).

subjects themselves, this is probably the underlying reason as to why they would place the quantifier in a particular position.[8]

This study does not attempt to qualify the function of *tout* in various positions or to determine what is "grammatical" and what is not. It is also not concerned with formulating a grammar that will adequately account for the various positions of *tout*. We know that what is grammatically correct is not always a real representation of how language users actually speak. This study then shows native speakers' reactions to the various positions tested. It shows which positions are found to be natural and which ones are not when *tout* is related to the subject with both intransitive and transitive verbs; to the direct object and to the indirect object. It is a study which compares the positions possible in SF to those in CF. It also tests to see if there are any differences in judgments due to various sociolinguistic factors such as age, education, gender or region.

[8]In fact, certain subjects commented that a particular structure was perfectly natural and gave it the highest rating because it functioned as "une forme d'insistance".

II. DESCRIPTION OF THE EXPERIMENT

Three groups of subjects were asked to fill out a questionnaire concerning the naturalness of the position of the quantifier *tout*. The first group of subjects consisted of 104 native French speakers from various regions in France, including the Ile de France, Bordeaux, Brittany, Charentes, Anjou, and the North (near Maubeuge) among others. There were 46 males, 46 females and 12 unknown. As gender was not a specific question on the questionnaire, it was sometimes impossible to determine whether the subject was male or female. They were not obliged to give their name if they preferred to remain anonymous. The subjects ranged in age from 11 to 66 with a fairly even distribution in each of seven age divisions. They were divided as follows:

1.	0-20	20 subjects
2.	21-25	24 subjects
3.	26-30	11 subjects
4.	31-35	18 subjects
5.	36-40	13 subjects
6.	41-49	9 subjects
7.	50+	15 subjects

Education levels were divided into three categories:

1)BAC- = Those who did not have a baccalaureat. This included students still in high school, workers and those who had a vocational licence, such as secretaries and technicians.
2)BAC = Those who had completed their baccalaureat, which is often considered to be the equivalent of two years of college in North America.
3)BAC+ = Those with some university. This included people with and without degrees.

There were 38 subjects in category one, 16 in category two, and 50 in category three.

The second group of subjects came from Eastern Canada. They were primarily from Quebec, but there were also a few from southern Ontario and the Maritimes. Of the 78 subjects from Eastern Canada, 42 are currently living in Quebec, while the other 36 were

originally from Eastern Canada, but are currently living in Alberta. There were 50 females, 27 males and one unknown. They ranged in age from 14 to 90. The same age divisions were made for this group as listed above. The education levels for the two Canadian groups were divided as follows:

1) H.S.- = Those subjects with less than a high school education.
2) H.S. = Those subjects with only a high school diploma.
3) H.S.+ = Those subjects with some university, but no degree.
4) B.A. = Those subjects with some kind of undergraduate degree.
5) B.A.+ = Those with some education beyond their undergraduate degree. They may or may not have obtained a graduate degree.

It was decided to divide the education levels differently for the French and Canadian groups since the two educational systems are not equivalent.

The third group of subjects came from Western Canada with the majority coming from Alberta. There were also a few from British Columbia and Saskatchewan. There were 86 subjects in this group; 62 females, 22 males and two unknown. They ranged in age from 17 to 81. The same divisions for age and education were used for the Western Canadian group as were used for the Eastern Canadian group. Since it was found that there were no significant differences between the two Canadian groups, when sociolinguistic factors such as age, education and gender were tested, the two groups were tested as one homogeneous group. This resulted in the following divisions:

EDUCATION	AGE
1. H.S.- = 18	1. 0-20 = 14
2. H.S. = 29	2. 21-25 = 48
3. H.S.+ = 62	3. 26-30 = 26
4. B.A. = 42	4. 31-35 = 14
5. B.A.+ = 13	5. 36-40 = 15
	6. 41-49 = 10
	7. 50+ = 37

As for the distribution of the questionnaire, 86 of the104 native French speakers from France received and returned their questionnaires by mail, while 18 subjects were currently living in Alberta and were asked personally to complete the questionnaire. The mail was also used to acquire the responses of 42 of the 78 subjects from Eastern Canada. For those living in Alberta, copies of the questionnaire were sent through mutual friends or delivered to various francophone businesses in the area. A brief explanation was offered to at least one representative in each case, but essentially, the questionnaire was viewed to be self-explanatory.

The questionnaire consisted of 60 tokens. The subjects were asked to judge each token as to the naturalness of the position of the quantifier *tout* which was represented by [T].[9] The noun phrase to which the quantifier was related was underlined, so as to avoid confusion, particularly in those tokens containing both a full subject and object NP.[10] This was clearly explained in the instructions (see Appendix A for the questionnaire used). A naturalness scale ranging from one to five was used for making their judgments.

---

[9] In CF, *tout* is usually pronounced /tUt/ regardless of the spelling. In a pilot study done earlier, the quantifier was spelled out, agreeing in number and gender with the NP to which it was related. Some tokens were given a lower naturalness rating because the subjects were somehow bothered by the spelling of the quantifier, although it was grammatically correct. The symbol [T] was used in this experiment so that the subjects could interpret the form and the pronunciation of the quantifier according to their personal dialect.

[10] Although the quantifier occupied different positions in different tokens, the function of the quantifier was always the same, that is, it was related to the NP that was underlined and always kept the same meaning. Despite the fact that the NP was underlined to avoid confusion so that the subjects would interpret [T] as having the same function in all tokens, some subjects were eliminated because it was obvious that they had misinterpreted the function of [T]. This may account for some naturalness judgments that were higher than one might have expected.

e.g. Les enfants ont mangé [T].

This token may have been interpreted as *The children ate everything.* as opposed to the desired correct interpretation *The children all ate.* The first interpretation would lead the subject to judge this token as a five, because it is a perfectly grammatical and logical sentence. However, the function of [T] would no longer be related to the underlined NP. If they understood the sentence as having the second meaning, then they should have ranked it as being unnatural. In cases where it was obvious that the subject had misinterpreted the token, adjustments in scoring were made.

The judgment scale used was as follows:

5 = the most natural position, what one would normally say
4 = common, but not as natural as 5
3 = undecided, sometimes heard
2 = not very natural, rarely used
1 = the least natural position, never used

The subjects were also instructed not to analyse and compare tokens of the same type. An average of 15 to 20 minutes was spent completing the questionnaire.

The tokens themselves were divided into four major syntactic categories. There were 8 to 16 tokens in each syntactic group dependent upon the number of positions possible and 8 fillers. All tokens were six to nine words in length and for each syntactic group there were four different tokens for each position. Within each syntactic group, the verbs were all in the compound past tense (passé composé), whereas, in most cases, simple tense verb forms were used in the fillers. Within each syntactic group, a certain number of positions for [T] were possible. The five positions possible were as follows:

A = [T] immediately to the left of the noun phrase it modifies.
B = [T] between the auxiliary verb and the past participle.
C = [T] after the past participle but not in absolute final position.
D = [T] after the past participle in absolute final position.
E = [T] after the past participle but preceding the preposition related to the indirect object.

The four syntactic groups were as follows:

SYNTACTIC GROUP I - [T] related to the subject of the sentence with intransitive verbs. Positions A, B, C and D were possible.

Pos A = [T] les garçons sont partis à la guerre.
Pos B = Les garçons sont [T] partis à la guerre.
Pos C = Les garçons sont partis [T] à la guerre.
Pos D = Les garçons sont partis [T].

SYNTACTIC GROUP II - [T] related to the subject with transitive verbs. Positions A, B, C, and D were possible.

Pos A = [T] les femmes ont lu ces livres.
Pos B = Les femmes ont [T] lu ces livres.
Pos C = Les femmes ont lu [T] ces livres.
Pos D = Les femmes ont lu [T].

SYNTACTIC GROUP III - [T] related to the direct object. Positions A and B were possible.

Pos A = Il a acheté [T] ses meubles à crédit.
Pos B = Il a [T] acheté ses meubles à crédit.

SYNTACTIC GROUP IV - [T] related to the indirect object. Positions A, B, and E were possible.

Pos A = J'ai songé à [T] mes amis.
Pos B = J'ai [T] songé à mes amis.
Pos E = J'ai songé [T] à mes amis.

One-way manovas (multivariate analysis of variance) were used to test the significant differences between the three subject groups for each syntactic group and for the fillers. All levels of significance are at the .01 level (unless otherwise stated). One-way manovas were used as they are very conservative tests. They test the entire set of dependent variables at once and are adjusted for correlations among the dependent variables, thus all tests were controlled with the probability of a Type 1 error equal to the level of significance (Huck, 1974,178). "A Type I error refers to accepting the scientific hypothesis when in fact it is not correct." (Christensen, 1980, 311). The native French speakers from France were compared separately to each of the two Canadian groups. Then the two Canadian groups were compared to each other. Manovas were also used to look at various sociolinguistic factors, such as age, education, and gender for all subject groups,

and region for the French. Since there were no significant differences found between the two Canadian groups for each syntactic group, they were tested as a single group for the sociolinguistic factors. The French were tested separately for each sociolinguistic factor.

Repeated measures were used to give a profile of the means for each subject group, for each syntactic group for each position possible within that syntactic group. Positions were also compared across and within subject groups and across syntactic groups.

III. RESULTS

A. SYNTACTIC GROUP I

As stated in the introduction, according to Kayne, when a quantifier is related to the subject of the sentence, it may occupy the same position as an adverb. That is not to say that the quantifier functions as an adverb. This is called Quantifier Posting or the Rightward Movement of the Quantifier (R-Tous). This implies that the quantifier *tout* in relationship to the subject of the sentence with the verb in a compound tense may occupy any of the following four positions:

A = [T] to the left of the subject NP ("normal" position).
B = [T] between the auxiliary verb and the past participle.
C = [T] after the past participle but not in absolute final position.
D = [T] after the past participle in absolute final position.

Positions B, C, and D are all positions that an adverb may occupy, as shown below:

Les filles sont *vite* parties hier soir.
Les filles sont parties *vite* hier soir.
Les filles sont parties *vite*.

The difference between SF and the French in Quebec, according to Daoust-Blais and Lemieux-Niéger, is that only positions A, B, and C are possible. Position D is not possible with compound verbs, but is possible with simple tense verbs. Kayne does not state this rule specifically, but then again, all examples of the quantifier in absolute final position are with simple tense verbs. Therefore a clear distinction is not made between the positions possible in relationship to simple or compound verbs. However, Clédat

(1899) offers the following example, so that it will be assumed that Position D is possible in SF.

(17) Ils sont venus tous.

In this experiment, both Syntactic Group I and Syntactic Group II test the quantifier in the four positions listed above in relationship to the subject. In Syntactic Group I, the verbs were all intransitive and in Syntactic Group II, they were all transitive. Table 1 shows the means for each position, for each subject group for Syntactic Group I. Figure 1 offers a profile of the means.

TABLE 1

SYNTACTIC GROUP I

[T] related to the Subject with Intransitive Verbs

#	Subject Group	A	B	C	D
104	French	4.92	4.63	2.92	1.72
78	Eastern Canada	4.78	4.43	1.91	1.27
86	Western Canada	4.85	4.40	1.92	1.34

Pos A = [T] to the left of the NP Pos C = [T] after PP but not absolute final

Pos B = [T] between Aux and PP Pos D = [T] in absolute final position

---

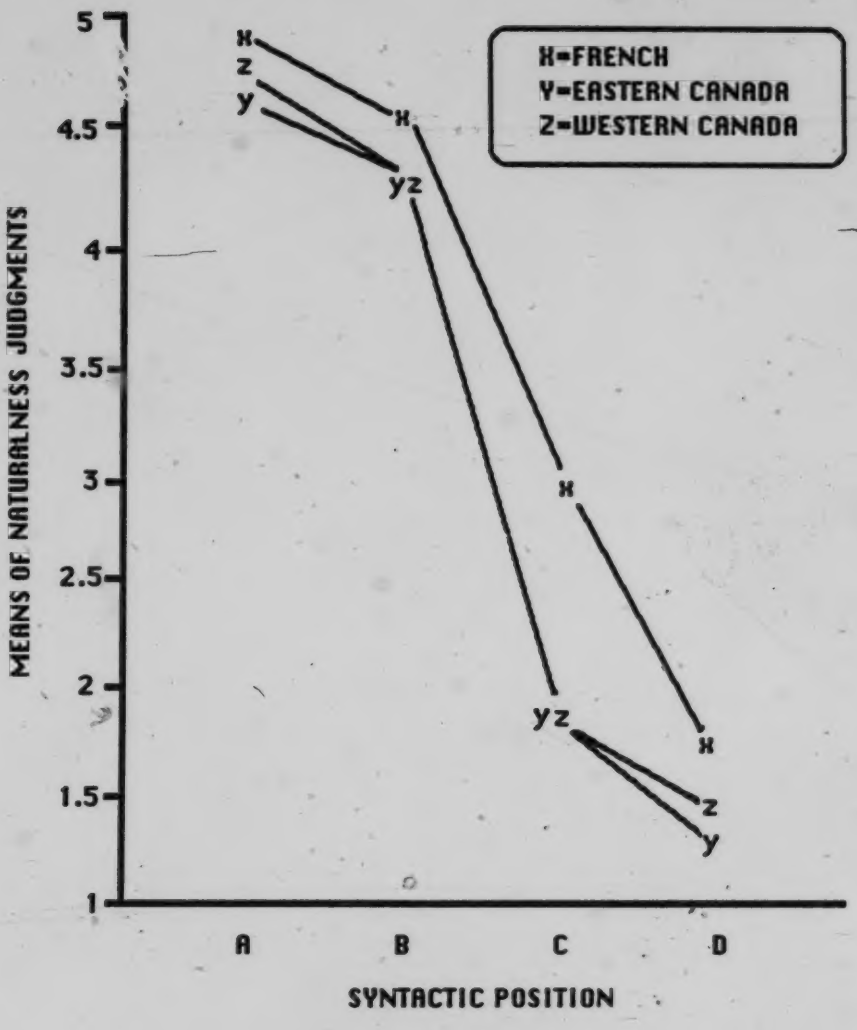
1. POSITION A

From the means, we can see that Position A ("normal" position) is viewed as the most natural position by all three subject groups. All three means are near the 5 level. There is no significant statistical difference between the three subject groups for this position.

FIGURE 1

SYNTACTIC GROUP I

[T] RELATED TO THE SUBJECT WITH INTRANSITIVE VERBS



A=[T] to the left of the NP
B=[T] between AUX and PP
C=[T] after PP but not in absolute final position
D=[T] in absolute final position

Although all three groups regard Position A as being the most natural, it would seem from the means that the French are slightly more linguistically secure in making their judgments. It is possible that the French Canadians have been told so often that their French is inferior to SF, that perhaps in this experiment they were a little more cautious when making their judgments. Some felt 'safer' answering with a 4 rather than a 5, because there was more flexibility in that category than in 5. Thus, they were not committing themselves to saying that a particular token was absolutely 'correct' or natural.

2. POSITION B

Position B is also judged to be highly natural, but not as natural as Position A. For this position, the subjects' judgments are closer to the 4.5 level than to 5. There was a significant difference ($p<.001$) between Position A and Position B for all three subject groups, but there were no significant differences between the three groups. Each group ranked Position A as the most natural position, which was to be expected. Position B is also a highly natural position, but perhaps due to stylistic preferences, is viewed to be less natural than Position A. As a result, it can be said that there are no differences between SF and CF for these two positions. They are treated the same by all three subject groups.

3. POSITION C

The same cannot be said for Position C. The native French speakers from France are quite divided as to the naturalness of Position C, that is, [T] after the past participle but not in absolute final position, as in (1b):

(1b) Les garçons sont partis [T] à la guerre.

The scores here ranged from 1 to 5 with the mean near the 3 level. There were also high standard deviations which are another indication of their indecisiveness. This structure is obviously used or heard sometimes by some people, but not by everyone. Again, this may be due to stylistic preferences. Generally a speaker moves the quantifier out of its normal position when he wishes to emphasize or draw attention to a particular point. Therefore, the speaker would be placing the emphasis on the fact that *all of the boys went to war*, that is every single one of a specific group. The *all* is emphatically stressed. This would be a structure that is not commonly used, but rather is used only in certain situations. In fact, more attention may be drawn to [T] in this position than in Position B, because it would appear to be less commonly used. Thus in speech, given the proper pauses and stress, this would be considered a perfectly natural structure. This would then seem to lend some support to Kayne's argument that the quantifier may occupy the same position as an adverb. In general, longer adverbs and those that are less commonly used follow the past participle in compound verbs, whereas the shorter, more commonly used ones usually fall between the auxiliary verb and the past participle (Grevisse, 1964). Most grammar books will admit, however, that there is a great deal of flexibility involved when it comes to the rules on the placement of adverbs.

The French Canadians seem to view this position quite differently from the French. Both Canadian groups judged this position as approximately a 2, which indicates that it is not very natural and is rarely used. The significant difference between the French and the French Canadians would seem to indicate that there is a definite disagreement between SF and CF as to the naturalness of this position. This contradicts Daoust-Blais and Lemieux-Niéger when they state that [T] after the past participle is possible as long as there is some expansion. Clearly CF speakers do not find this particular structure very natural, and definitely do not find it as natural as the French do. These findings do not

indicate that this construction would never be used, but that it is very rarely used, which is not what is implied by Daoust-Blais and Lemieux-Niéger.

4. POSITION D

All three groups generally view Position D as being unnatural, and there are no significant statistical differences between the three groups. The French mean, however, tends to lean slightly more towards the 2 level rather than level 1 as for the Canadians. This indicates that for the French this is not a very natural position, but may be heard or used on rare occasions, as in Clédat's example (17). The results for the Canadian groups support Daoust-Blais and Lemieux-Niéger's claim that this structure is not used in the French in Quebec, but as there are no significant differences between the judgments made by SF and CF speakers for this position, their claim would seem to be applicable to SF as well, and is not exclusive to CF.

5. MOVEMENT ACROSS POSITIONS

There are significant differences for each subject group for each position within Syntactic Group I. With each movement of the quantifier out of its normal position, there is a significant decrease in naturalness resulting in a position that speakers generally find as being highly unnatural. Thus, Position A is significantly more natural than B, B is more natural than C, and C is more natural than D.

B. SYNTACTIC GROUP II

The results for Syntactic Group II, [T] related to the subject with transitive verbs, are similar to those of Syntactic Group I as seen in Table 2 and Figure 2. There is a steady decrease in naturalness as [T] is moved out of its normal position. The further [T] moves

TABLE 2

SYNTACTIC GROUP II

[T] related to the Subject with Transitive Verbs

#	Subject Group	A	B	C	D
104	French	4.94	4.18	2.27	1.77
78	Eastern Canada	4.85	4.14	2.08	1.56
86	Western Canada	4.90	3.94	2.13	1.54

Pos A = [T] to the left of the NP Pos C = [T] after PP but not absolute final

Pos B = [T] between Aux and PP Pos D = [T] in absolute final position

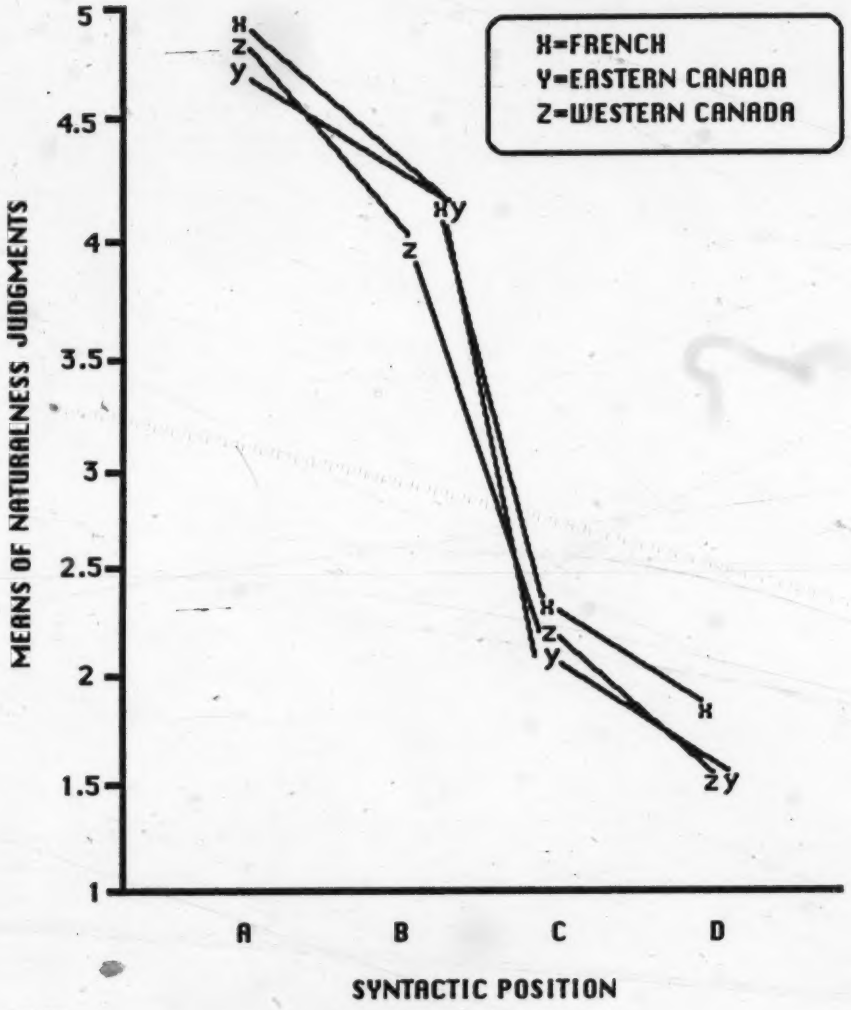
from A, the less natural it becomes. This is not surprising considering that both syntactic groups test [T] related to the subject in the same four positions with only the transitivity of the verb being different. We will see later that the transitivity of the verb does seem to have some influence on the subjects' judgments.

Position A is ranked by all groups as the most natural position, again just as one would expect. There is almost complete agreement between the three subject groups. In fact, there are no significant differences between any subject group for any position within Syntactic Group II, as opposed to the significant differences found between the French and the two Canadian groups for Position C in Syntactic Group I. Therefore, the three subject groups would appear to agree more amongst themselves as to the naturalness of the position of the quantifier in relationship to the subject with transitive verbs than they do when [T] is related to the subject with intransitive verbs. This would tend to indicate that the transitivity of the verb may play an important role as to the naturalness of a particular position.

FIGURE 2

SYNTACTIC GROUP II

[T] RELATED TO THE SUBJECT WITH TRANSITIVE VERBS



A=[T] to the left of the NP
B=[T] between AUX and PP
C=[T] after PP but not in absolute final position
D=[T] in absolute final position

C. SYNTACTIC GROUP I VS SYNTACTIC GROUP II

There are similar tendencies between Syntactic Group I and Syntactic Group II. For example, Position A is the most natural position; Position B is viewed as being quite common, but not as natural as Position A. This was true for both Syntactic Groups. There were no significant differences between Syntactic Groups I and II for Position A for any subject group, but there was a significant difference ($p<.001$) between the naturalness judgments for Syntactic Group I for Position B and those for Syntactic Group II. Position B is significantly more natural for Syntactic Group I than for Syntactic Group II for all three subject groups. This is most likely due to the transitivity of the verb, as that is the only major difference between the two syntactic groups. With intransitive verbs, [T] could only relate to the subject NP since no object NP is possible. Thus with intransitive verbs, the possibility of constructing an ambiguous sentence is not present, as [T], whatever its position could only relate to the subject NP. With transitive verbs, on the other hand, when [T] is moved from its normal position, some ambiguity may be created as there are now two NPs to which [T] could be related. This is particularly true for the French Canadians, as there is the possibility of [T] relating to either the subject or object NP when placed between the auxiliary verb and the past participle. Although that is not true for SF, perhaps SF speakers are somewhat more cautious when choosing this construction with transitive verbs simply because there is more than one NP in the sentence, even though in SF, [T] between the auxiliary and the past participle can only relate to the subject NP. (That is when both the subject and the object NPs are full NPs. Ambiguous constructions would be possible if the object NP were a pronoun.)

For Position C, there is no significant difference between Syntactic Groups I and II for the French Canadians, thus, in both instances, this position is viewed as being unnatural and seldom used. This is not the case for the French. In Syntactic Group I,

Position C fell into judgment category 3 in which the subjects were undecided as to the naturalness of the position of [T]. In Syntactic Group II, this position is ranked as being closer to level 2, thus causing them to judge the structure in the same way as the Canadians rather than differently, as found for Syntactic Group I. Again the transitivity of the verb is the probable cause for this difference. It is rare that one would place a quantifier immediately to the left of an NP that it did not modify. This could, again cause some ambiguity for the listener, especially if the subject NP and the object NP were the same number and gender. This was never the case in any of the tokens used in this experiment, so it is assumed that none of the tokens was ambiguous. In speech, one normally tries to avoid ambiguous sentences, because the speaker wants the listener to understand his message. Thus it is conceiveable that in this case, one might have expected an even lower ranking. Those who tended to rank this position quite high may have misinterpreted the token. They may have assumed that the quantifier modified the NP to the left. That would place [T] in its normal position, even though it was not the NP that was underlined, signifying that it was the subject NP and not the object NP that was being modified. (Adjustments were made in this area, but as some subjects were not always consistent in their judgments for tokens illustrating the same position, it was difficult to know exactly how they were interpreting the sentences.) Nonetheless, it is clear that the French view Position C as being significantly less natural in relationship to the subject with transitive verbs than they do with intransitive verbs.

There was no significant difference between Syntactic Group I and Syntactic Group II for Position D for the French. They view this position as being very unnatural and rarely used. There was also no significant difference for the Western Canadians, however there was a significant difference for the Eastern Canadians. Although both Canadian groups view this position as being highly unnatural for both Syntactic Group I and II, the Eastern Canadians gave a statistically significant higher ranking to Position D in relationship to the subject with transitive verbs as opposed to with intransitive verbs. In this case,

however, it is not clear that this is due to the transitivity of the verb. It may again be due to a misinterpretation of the token on the part of some subjects. For example, in reading the token they may have changed the function of the quantifier to a pronoun resulting in a perfectly grammatical sentence. Thus a sentence like *Les enfants ont mangé [T].* may have been misread as meaning *The children ate everything.* as opposed to its intended meaning of *All the children ate.* This misinterpretation did not seem to hold true for all the tokens in this group, therefore one might conclude that this difference is not really significant (although statistically different). In any case, it is clear that this position is generally viewed as being unnatural for all three subject groups.

D. SYNTACTIC GROUP III

For Syntactic Group III, where [T] is related to the direct object, there are only two positions possible: A and B. The reader is reminded that according to Kayne, the leftward movement of the quantifier is not possible when it relates to a full NP for SF speakers.[11] Only tokens of this type were used in this experiment. Thus for the French, only Position A should be viewed as natural and Position B should be viewed as highly unnatural, which is exactly what the results indicate as illustrated in Table 3 and Figure 3.

For the French Canadians, according to Daoust-Blais and Lemieux-Niéger, it is possible to place the quantifier between the auxiliary verb and the past participle, even when it modifies a full direct object NP. From the results given, it appears that this is true for some French Canadian speakers, but not for others. The responses in this

[11]The leftward movement of [T] is possible when it relates to a direct object pronoun, but not when it relates to a full NP. Sentence (1) below would be grammatically incorrect, but (2) would be a perfectly grammatical sentence. No structures like (2) were tested in this experiment.

(1) *Il a [T] acheté ses meubles à crédit.
(2) Il les a [T] achetés à crédit.

TABLE 3

SYNTACTIC GROUP III

[T] related to the Direct Object

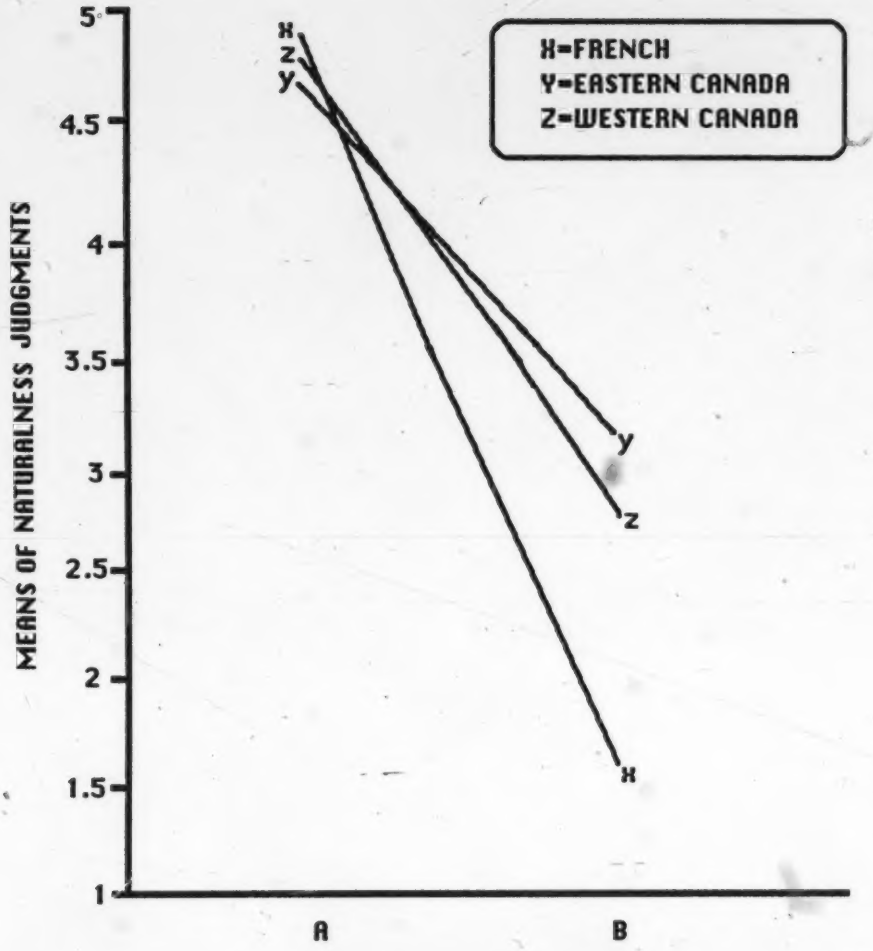
#	Subject Group	A	B
104	French	4.89	1.61
78	Eastern Canada	4.71	3.26
86	Western Canada	4.80	2.89

Pos A = [T] to the left of the NP

Pos B = [T] between Aux and PP

category ranged from 1 to 5 with the mean falling around level 3 with high standard deviations, indicating that they are undecided as to the naturalness of this position. It does suggest, however, that this position is not totally unnatural. Although both Canadian groups' scores were near the 3 level, and there was no significant statistical difference between the means of the two Canadian groups, the subjects from Eastern Canada seem to find this position slightly more natural than those from Western Canada. It may be attributable to the fact that some Western Canadian speakers have been exposed to more SF than others. It is clear that the French find this position highly unnatural. These results then would seem to support Daoust-Blais and Lemieux-Niéger's claim. It must also be noted that there is again a significant decrease in naturalness when the quantifier is moved out of its normal position for all three subject groups.

FIGURE 3
SYNTACTIC GROUP III
[T] RELATED TO THE DIRECT OBJECT



A=[T] to the left of the NP

B=[T] between AUX and PP

E. SYNTACTIC GROUP IV

Finally, for Syntactic Group IV, [T] is related to the indirect object and three positions are possible: A, B and E. Kayne's earlier statement that L-Tous may not take place when it modifies a full object NP would also apply here. For the French Canadians, Position B should be acceptable for this syntactic group, just as it was for Syntactic Group III, but this is obviously not the case as shown in Table 4 and Figure 4.

TABLE 4

SYNTACTIC GROUP IV

[T] related to the Indirect Object

#	Subject Group	A	B	E
104	French	4.92	1.13	1.28
78	Eastern Canada	4.64	1.61	1.43
86	Western Canada	4.66	1.53	1.43

Pos A = [T] to the left of the NP Pos B = [T] between Aux and PP

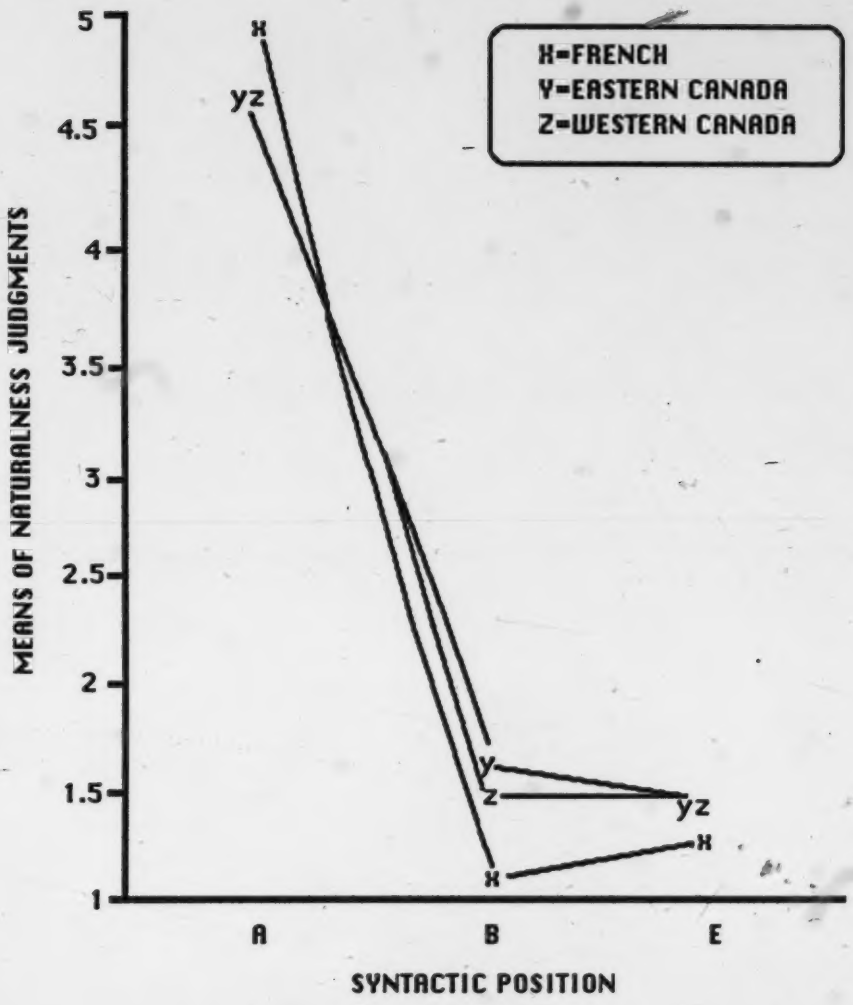
Pos E = [T] after PP but before the preposition related to the IO

With simple tense verbs, Position E would be possible, according to Daoust-Blais and Lemieux-Niéger, but not with compound tense verbs as were used here. Thus, Positions A and B should be natural for the French Canadians and Position E should not be natural. Instead, it can be noted that Position A was natural, but both Positions B and E were judged as being highly unnatural. There were no significant differences between Positions B and E for any subject group. There was a significant difference between the

FIGURE 4

SYNTACTIC GROUP IV

[T] RELATED TO THE INDIRECT OBJECT



A=[T] to the left of the NP
B=[T] between AUX and PP
E=[T] after PP but before the preposition marking the IO

French and each Canadian group for Position B. Position B is viewed as completely unnatural for the French as their judgment falls at the 1 level, whereas, the means for the two Canadian groups fall at the 1.5 level. This is still a clear indication that the Canadians find this position highly unnatural, but not as unnatural as the French. Therefore, these results would seem to refute Daoust-Blais and Lemieux-Niéger's claim that Position B is used in the French in Quebec. If it is used, it is extremely rare.

It should be noted that there were no other significant differences between the French and the two Canadian groups, but it is clear that the French were far more secure in judging Position A as a 5 than were the Canadians. All three groups find Position A to be highly natural, but the French Canadians were more hesitant in their responses. It is possible that they again felt that a 4 was safer than committing themselves to something that was absolute. It may also have been the tokens themselves. Perhaps some did not like a particular token due to another factor. For example, a sentence such as:

(18) J'ai réfléchi à [T] mon affaire.

was often given a 4 rather than a 5 because, according to some subjects, they would have preferred the indirect object NP in the plural rather than in the singular. This, however, means that they were judging the token on another grammatical factor and not on the position of [T].

The French subjects' judgments clearly indicate that Positions B and E are highly unnatural, while some French Canadians allowed for the slight possibility of this structure occurring. Although there was a significant statistical difference between the French and the Canadians for Position B, it is evident that all three groups find these two positions to be extremely unnatural, as their judgments would be ranked near level 1, and there were no differences between Positions B and E. As with the other syntactic groups, there was a significant decrease in naturalness as the quantifier was moved out of its normal position for each subject group.

F. MOVEMENT ACROSS SYNTACTIC GROUPS

Repeated measures were used to look at the various positions across syntactic groups. The means are shown in Tables 5, 6, 7, and 8, and a profile of the means for each position is illustrated in Figures 5, 6, 7, and 8.

1. POSITION A

Table 5 and Figure 5 offer a profile of the means for Position A across the four syntactic groups for each subject group. There were no significant differences for the French, thus normal position was judged approximately the same for each syntactic group. The fact that [T] was related to the subject or the object was insignificant when the subjects made their decisions. This was not true for the French Canadians. There were no significant differences between Syntactic Group I and Syntactic Group II as both

TABLE 5

POSITION A FOR SYNTACTIC GROUPS I, II, III, AND IV

#	Subject Group	SG I	SG II	SG III	SG IV
104	French	4.92	4.94	4.89	4.92
78	Eastern Canada	4.78	4.85	4.71	4.64
86	Western Canada	4.85	4.90	4.80	4.66

Pos A = [T] to the left of the NP modified

SG I = [T] related to the subject with intransitive verbs

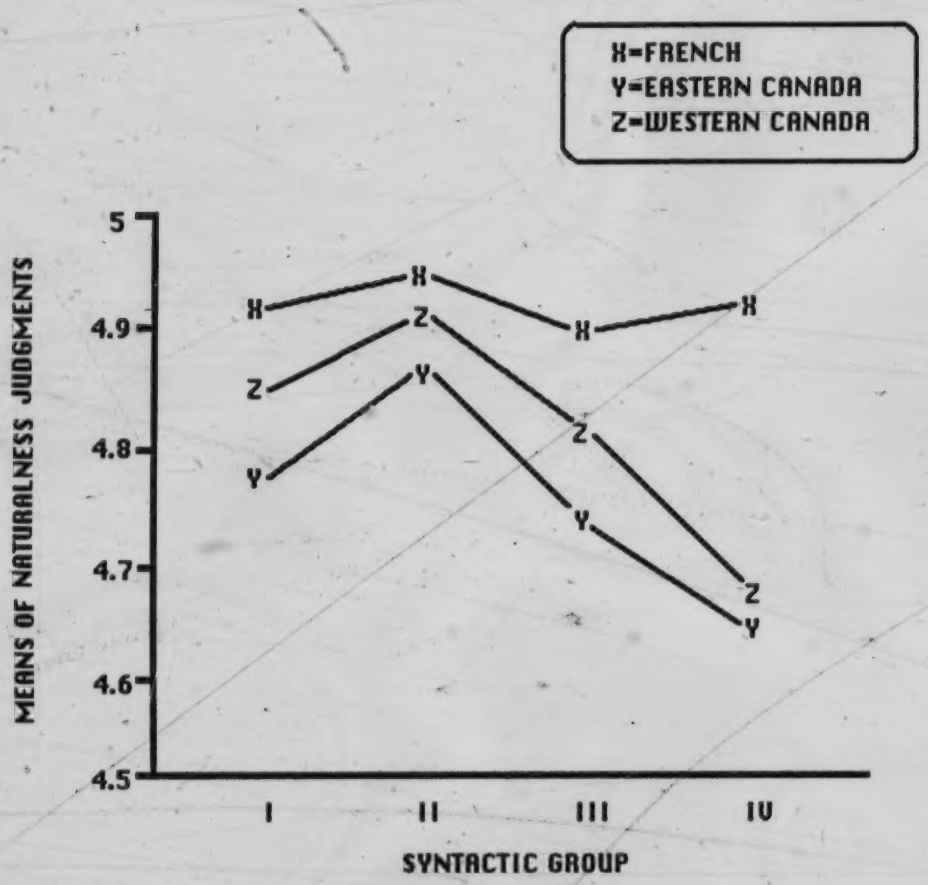
SG II = [T] related to the subject with transitive verbs

SG III = [T] related to the direct object

SG IV = [T] related to the indirect object

FIGURE 5

POSITION A FOR SYNTACTIC GROUPS I, II, III, AND IV



A=[T] to the left of the NP it modifies

I=[T] related to the subject with intransitive verbs

II=[T] related to the subject with transitive verbs

III=[T] related to the direct object

IV=[T] related to the indirect object

of these related to the subject. There were also no significant differences between Syntactic Groups III and IV as both of these related to the object of the sentence. There were, however, significant differences ($p<.001$) between the two syntactic groups relating to the subject and the two syntactic groups relating to the object. It must first be made clear that for all four syntactic groups, Position A was judged to be the most natural position, but for some reason, the French Canadians were more hesitant to give a judgment of 5 to the quantifier relating to an object NP than they were to a subject NP. The reasoning behind this is not clear. It may again be attributable to their linguistic insecurity or may have had something to do with the tokens themselves. As discussed in section E Syntactic Group IV, it may have something to do with the number of the NP to which [T] was related. All subject NPs in Syntactic Groups I and II were plural, but half of the object NPs were singular and the other half were plural. Although the results are not conclusive, when [T] was related to a singular object NP, it was judged slightly lower by some Canadian subjects than were the plural NPs. The influence, if any, of both number and gender constitutes another area for futher investigation.

2. POSITION B

Table 6 and Figure 6 show the profile of the means for Position B in which [T] has been placed between the auxiliary verb and the past participle. There were significant differences ($p<.001$) for each subject group between each syntactic group. When the quantifier relates to the subject with intransitive verbs it is judged to be a highly natural position. When the verb is transitive, it is still judged to be highly natural, but is significantly less natural than with intransitive verbs. When the quantifier relates to the direct object, it is significantly less natural than when it relates to the subject, but more natural than when it relates to the indirect object. The French viewed this position as highly

TABLE 6

POSITION B FOR SYNTACTIC GROUPS I, II, III, AND IV

#	Subject Group	SG I	SG II	SG III	SG IV
104	French	4.63	4.18	1.61	1.13
78	Eastern Canada	4.43	4.14	3.26	1.61
86	Western Canada	4.40	3.94	2.89	1.53

Pos B = [T] between AUX and the PP

SG I = [T] related to the subject with intransitive verbs

SG II = [T] related to the subject with transitive verbs

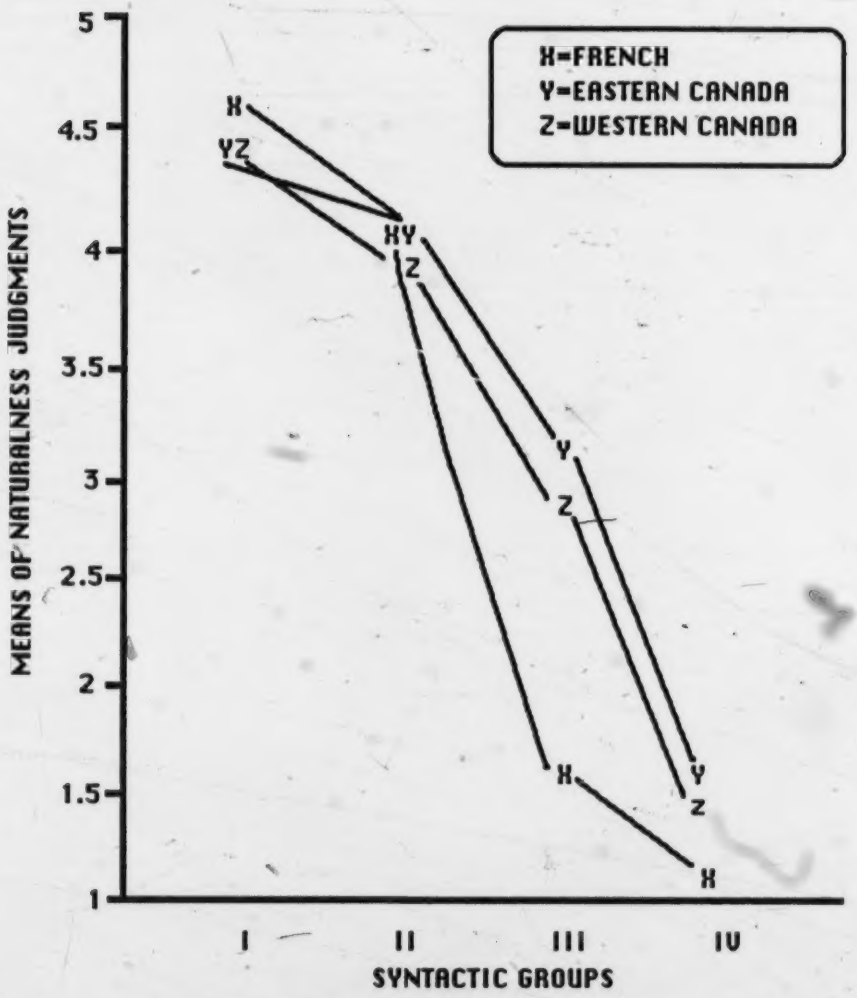
SG III = [T] related to the direct object

SG IV = [T] related to the indirect object

unnatural, while the French Canadians were undecided as to the naturalness of this position, indicating that it is heard or used occasionally. Finally, when the quantifier relates to the indirect object, it is viewed as highly unnatural by all three subject groups and is significantly ($p<.001$) less natural for this syntactic group than for any of the others. Although there was a statistical difference for the French when Syntactic Groups III and IV were tested, it must be noted that in both syntactic groups this position was judged as highly unnatural, which was not the case for the French Canadians.

FIGURE 6

POSITION B FOR SYNTACTIC GROUPS I, II, III, AND IV



B=[T] between AUX and the PP
I=[T] related to the subject with intransitive verbs
II=[T] related to the subject with transitive verbs
III=[T] related to the direct object
IV=[T] related to the indirect object

3. POSITION C

Position C can only be compared across Syntactic Groups I and II as these positions do not exist in Syntactic Groups III and IV. For Position C, there is a significant difference between Syntactic Groups I and II for the French, but not for the two Canadian Groups, as shown in Table 7 and Figure 7. Therefore, the transitivity of the verb seems to have influenced the French subjects' judgments as to the naturalness of this position (as was seen for Position B), but the transitivity of the verb played no significant role in the French Canadians' judgments (contrary to what was seen for Position B).

TABLE 7

POSITION C FOR SYNTACTIC GROUPS I AND II

#	Subject Group	SG I	SG II
104	French	2.92	2.27
78	Eastern Canada	1.91	2.08
86	Western Canada	1.92	2.13

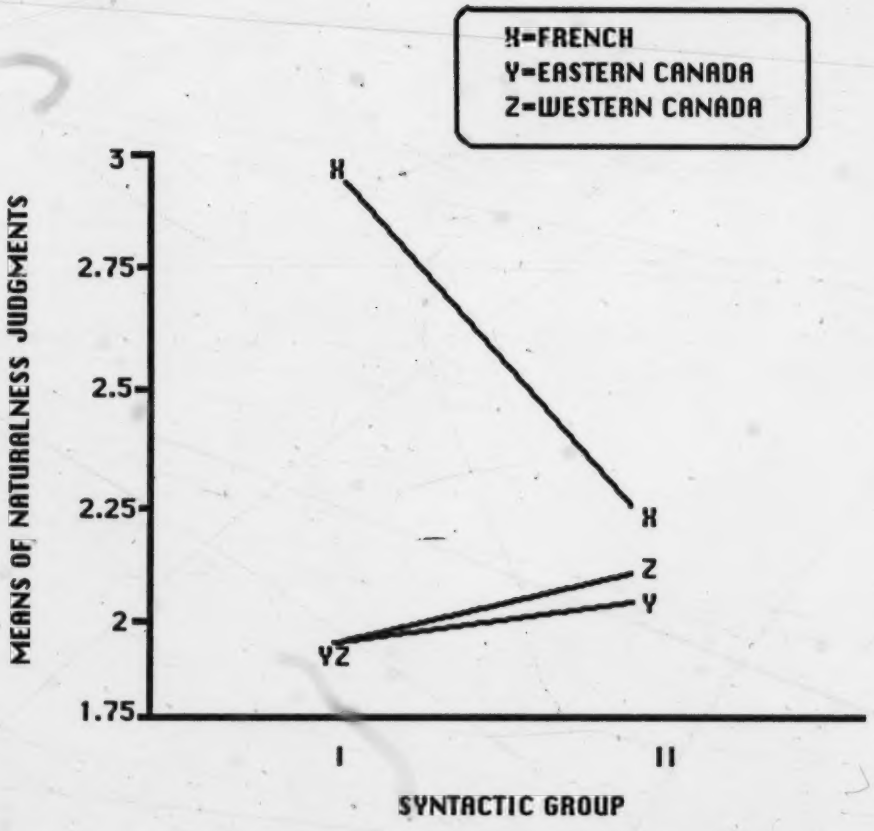
Pos C = [T] after the PP but not in absolute final position

SG I = [T] related to the subject with intransitive verbs

SG II = [T] related to the subject with transitive verbs

FIGURE 7

POSITION C FOR SYNTACTIC GROUPS I AND II



C=[T] after PP but not in absolute final position

I=[T] related to the subject with intransitive verbs

II=[T] related to the subject with transitive verbs

4. POSITION D

Like Position C, Position D can only be compared between Syntactic Groups I and II as shown in Table 8 and Figure 8. There was no significant difference between the two syntactic groups for the French, but there was a significant difference for the two Canadian groups. This is the exact opposite of what was seen for Position C. Position D was significantly less natural with intransitive verbs than with transitive verbs, however Position D for both syntactic groups is viewed as being unnatural for all three subject groups.

TABLE 8

POSITION D FOR SYNTACTIC GROUPS I AND II

#	Subject Group	SG I	SG II
104	French	1.72	1.77
78	Eastern Canada	1.27	1.56
86	Western Canada	1.34	1.54

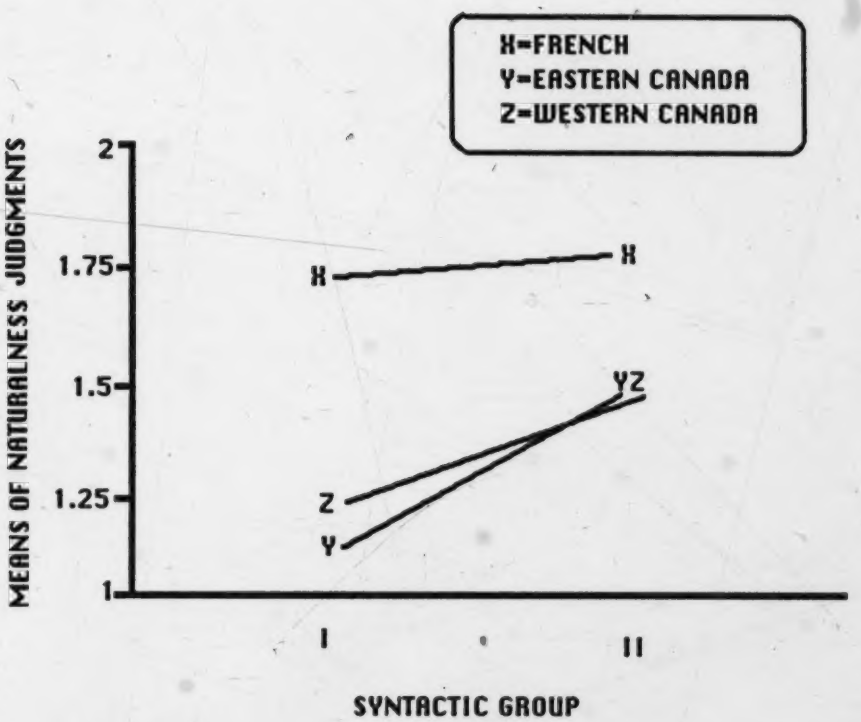
Pos D = [T] after PP in absolute final position

SG I = [T] related to the subject with intransitive verbs

SG II = [T] related to the subject with transitive verbs

FIGURE 8

POSITION D FOR SYNTACTIC GROUPS I AND II



D=[T] in absolute final position

I=[T] related to the subject with intransitive verbs

II=[T] related to the subject with transitive verbs

G. FILLERS

Eight fillers were used that were syntactically different from the tokens used in the four principle syntactic groups. Although the findings here could not be viewed as conclusive since there were only one or two tokens of a particular type, there are some general tendencies which lend themselves to speculation and further investigation. Table 9 shows the tokens and the means for each subject group.

TABLE 9

FILLERS

TOKENS	FR	EC	WC
(a) Les voisins viendront [T] ce soir.	4.32	3.91	3.87
(b) Les filles aiment [T] cet acteur.	3.78	3.17	2.79
(c) Le café renverse [T].	1.12	1.69	1.55
(d) Je pense [T] à mon affaire.	1.45	1.65	1.72
(e) Il se souvient [T] de ses petites amies.	1.24	1.76	1.67
(f) C'est [T] elle qui a tué les lièvres.	1.03	1.72	1.38
(g) Les garçons qu'elle a [T] connus sont morts.	1.91	1.96	1.76
(h) La maîtresse a [T] laissé les enfants sortir.	1.14	2.31	2.08

FR=French EC=Eastern Canada WC=Western Canada

Token (a) examines [T] related to the subject after a simple tense intransitive verb, but not in absolute final position. All three groups judge this token near the 4 level, indicating that it is very common, but not as natural as 5. There are no significant differences between the three subject groups. This structure may be compared to Position B for Syntactic Group I where [T] was placed between the auxiliary verb and the past

participle. Position B for Syntactic Group I was significantly more natural than token (a) for all three subject groups. This might then suggest that R-Tous is slightly more natural with compound intransitive verbs than with simple tense intransitive verbs.

Token (b) tests [T] related to the subject after a simple tense transitive verb. The French rank this position again near the 4 mark, but it is significantly less natural than (a), thus the transitivity of the verb would seem to be an influencing factor when the subjects made their judgments, just as was found with the verbs in a compound tense. It is also significantly less natural than Position B Syntactic Group II, which would be the comparable structure with compound verbs. Thus, this position is ranked more natural with compound verbs than with simple tense verbs, as was true for (a). It is quite different for the two Canadian groups, however. When Position B Syntactic Group II was tested, there were no significant differences between the three groups. They all judged this position around level 4 . The two Canadian groups in this case judged (b) to be in the 3 range indicating that as a group, they were undecided as to the naturalness of this position, but that it is not totally unnatural. The Canadian groups' judgments were significantly less natural ($p<.001$) for token (b) than for Position B Syntactic Group II. In fact, these two types of structures are viewed so differently, that their judgments do not fall into the same range. Obviously, the fact that a simple tense verb was used as opposed to a compound tense verb played an important role in influencing their decisions. There was also a significant difference between the French and the Western Canadians at .01 and between the French and the Eastern Canadians at .02. Thus, for this particular structure, the three groups are no longer in agreement as to the naturalness of the position of [T].

Token (c) was an example of [T] related to the subject with a simple tense transitive verb in absolute final position. This would be comparable to Position D Syntactic Group II. This particular token was taken directly from Daoust-Blais and Lemieux-Niéger's study. It was used because the sentence itself does not seem to make any sense. Therefore, the subjects were more likely to give it a lower naturalness rating based on

semantics rather than the position of [T]. In fact, when some subjects completed the questionnaire, they asked what this sentence was supposed to mean or marked it as not meaning anything. The French judged Position D Syntactic Group II to be near the 2 level which means that this type of construction was not very natural and was seldom used. However, they judged (c) to be very close to 1 indicating that it was not natural at all and would never be used. This may not have anything to do with the fact that in one case the verb was in a compound tense and in the other it was in a simple tense. As stated earlier, this most likely has to do with the semantics of the sentence. There was no significant difference in naturalness between the French and the two Canadian groups for this particular token. There was also no significant difference between the two Canadian groups. No significant differences were found between Syntactic Group II Position D and token (c) either. But according to Daoust-Blais and Lemieux-Niéger, it is possible to have [T] in absolute final position after a simple tense verb. The two Canadian groups judged this token to be highly unnatural just as they did for Position D Syntactic Group II, which would seem to refute their claim since this token came directly from their study. It is assumed that Daoust-Blais and Lemieux-Niéger find no semantic difficulties with it in CF.

Tokens (d) and (e) looked at [T] related to the indirect object and was placed after a simple tense verb but before the preposition related to the indirect object. There were no significant differences between the judgments for (d) and (e) for any subject group. There were also no significant differences between the three subject groups for either token. The means for the three groups would indicate that this is a highly unnatural structure. However, according to Daoust-Blais and Lemieux-Niéger, it is possible to have [T] after a simple tense verb but before the preposition related to the indirect object, but it is not possible with compound tense verbs. Yet the subjects judged Position E Syntactic Group IV in which [T] is positioned after the past participle but before the

preposition related to the indirect object and tokens (d) and (e) in exactly the same way. This then questions Daoust-Blais and Lemieux-Niéger's hypothesis.

Tokens (f) and (g) tested the movement of [T] across relative clauses. If one were to rewrite token (f) as two simple sentences, [T] would appear in only one of the two simple sentences. In the complex structure, [T] was placed in the main clause, but it did not appear in that simple sentence. The French almost unanimously find this token to be completely unnatural. It would then seem safe to conclude that this type of construction is not at all possible for the French. There was a significant difference ($p<.001$) between the French and the Eastern Canadian group, but no significant differences between the Western Canadians and the other two groups. The Western Canadians' judgments were midway between the other two groups. This particular token came from the film Pris au collet which is part of the Toulmonde parle français series produced by the National Film Board of Canada. Thus, it is obviously a structure that may be used by certain French Canadians. Although there is no significant difference between the Eastern and Western Canadian groups, the Western Canadians' scores fall close to level 1, while the Eastern Canadians' judgments are closer to level 2. This may suggest that Western Canadians are less likely to move [T] into a clause where it would not be found originally.

The judgments for token (g) are quite different (at least for two of the three groups). In each case, the judgments are near level 2. There are no significant differences between the three groups, indicating that they all judged this token in approximately the same way. There were significant differences for the French and the Western Canadians when token (g) was compared to token (f). For this token, [T] would appear in both clauses were they rewritten as separate sentences. Thus, one has the option of moving [T]. The French and the Western Canadian groups make a clear distinction in naturalness between these two types of structures, while the Eastern Canadians do not. It would appear that some sort of leveling is taking place for the Eastern Canadians, so that they may move [T]

across clauses regardless of their original construction. This is not happening for the French or Western Canadians.

Finally, token (h) deals with [T] related to the direct object and placed between the auxiliary verb and the past participle followed by an infinitive of which the object of the conjugated verb would be the subject. In keeping with the general rule that L-Tous may not take place when [T] is related to a full object NP, the French ranked this position as being completely unnatural. It was, however, significantly lower than their judgments made for Position B Syntactic Group III. This may be due to the fact that there were two verbs involved which blocked L-Tous to an even greater extent, especially since the NP acts as both a subject and an object. There were significant differences ($p<.001$) between the French and the two Canadian groups, but none between the two Canadian groups. This structure for the Canadians was judged near level 2. It was also significantly less natural for both Canadian groups when their judgments were compared to those of Position B Syntactic Group III. Thus, for the Canadians as well, L-Tous is less likely to occur when the NP to which [T] is related has two grammatical functions and is used with a compound verb and an infinitive.

H. SOCIOLINGUISTIC FACTORS

The French were tested separately for each syntactic group and for the fillers to see if there were any significant differences amongst the subjects due to age, education level, region or gender. There were no significant differences due to age, education or region. The two Canadian groups were tested as one group for any differences due to age or education. There were no significant differences due to either one of these variables. This indicates that these particular sociolinguistic variables had no influence on the judgments made for each position for each syntactic group (for the profiles of the means for these sociolinguistic factors, see Appendices B, C and D).

As for gender, for the French, there was only one area in which there was a significant statistical difference between the males and females, but there were also some recurring tendencies in some of the other syntactic groups.

The one position where gender seemed to be significant was for Syntactic Group IV Position E, where [T] was after the past participle, but before the preposition related to the indirect object, as in :

(19) Il a songé [T] à ses petites amies.

As shown in Table 10, the mean for females was 1.13 while the males gave this a 1.39. It is obvious that both groups find this position highly unnatural, but the males are slightly less conservative in their judgments, leaving more room for variety. In general, most linguists would agree that females are usually more conservative in their speech than males. They are more likely to try to speak "correctly". This general tendency that females were more conservative than males in their judgments was found throughout the results dealing with gender (although there were no other significant statistical differences). This tendency is evident if one examines the means listed in Table 10.

For Syntactic Groups I and II, where other positions are definitely possible, females rank normal position slightly higher than males, but for the other positions, generally it is the males whose naturalness judgments are slightly higher, suggesting more flexibility as to what they view as natural. It is clear that both the males and females view each position in the same manner since there are no major level differences between the two groups. For Syntactic Groups III and IV, where normal position is really the only position possible, the subjects' judgments are almost exactly the same. But again, for Positions B and E, the females are slightly more conservative in their judgments as to the unnaturalness of these positions. There were obviously a few males who allowed for some deviation from the "norm".

TABLE 10

GENDER FACTOR FOR THE FRENCH

	A	B	C	D	E
	F/M	F/M	F/M	F/M	F/M
SG I	4.97/4.90	4.59/4.65	2.89/2.91	1.71/1.80	
SG II	4.99/4.92	4.08/4.30	2.28/2.21	1.71/1.92	
SG III	4.90/4.90	1.55/1.73			
SG IV	4.91/4.92	1.06/1.21			1.13/1.39

SG I = [T] related to the subject with intransitive verbs

SG II = [T] related to the subject with transitive verbs

SG III = [T] related to the direct object

SG IV = [T] related to the indirect object

POS A = [T] to the left of the NP modified

POS B = [T] between AUX and PP

POS C = [T] after PP but not in absolute final position

POS D = [T] after PP in absolute final position

POS E = [T] after PP but before the preposition related to IO

F=46 M=46

As for the two Canadian groups, there were two areas where there were statistically significant differences between the males and females. Table 11 offers a profile of the means for the two groups. There were no statistical significant differences for Syntactic Groups I and III, but there were for Syntactic Groups II and IV. Again, it must be noted that their naturalness judgments in all areas are basically the same. That is, there are no major discrepancies between the two groups. In Syntactic Groups II and IV, where there

are significant statistical differences ($p<.001$), one notes the same pattern as that exhibited by the French subjects. When one examines the means for Position A, 'normal' position, the females' judgments are higher than the males' (which is actually true for all four syntactic groups). Thus, females seem to prefer 'normal' position, as they know that [T] to the left of the NP it modifies is grammatically correct. They tend to be more conservative in their speech. On the other hand, again for Syntactic Groups II and IV, the males' judgments are higher than those of the females for each position outside of 'normal' position. These higher judgments are a reflection of males' more liberal or flexible attitude towards their own speech pattern. This sort of consistency was not completely upheld for Syntactic Groups I and III, where no statistical differences were found. It must also be noted that the number of males to females for both Canadian groups was extremely uneven. There were far more females than there were males, as opposed to the even distribution in the French group. It may be that, should more males be tested, the scores would be different. It would then appear that gender does have some effect on the naturalness judgments of the tokens, where females seem to be more conservative than males.

As for the fillers, the sociolinguistic variables of age, education and region did not seem to influence any of the subjects' judgments. Gender was not a factor for any of the fillers for the French, and was only significant for token (e) for the Canadians. The males ranked this token significantly higher than the females. The males of both Canadian groups ranked this token near level 2, while the females for both groups ranked it near 1.5, suggesting that females find this structure very unnatural. (For a complete breakdown of the means for gender for the fillers see Appendix E). This would lend some support to Daoust-Blais and Lemieux-Niéger's claim that this structure is possible, at least it seems to be for some males. What is interesting is the fact that the males ranked (d), a similar type structure, lower. There was a significant difference between tokens (d) and (e) for the males from Eastern Canada, but no significant difference for the Western

TABLE 11

GENDER FACTOR FOR THE TWO CANADIAN GROUPS

		A	B	C	D	E
		F / M	F / M	F / M	F / M	F / M
SG I	EC	4.83/4.69	4.47/4.37	1.91/1.90	1.26/1.28	
	WC	4.88/4.77	4.42/4.34	1.88/1.97	1.27/1.49	
SG II	EC	4.92/4.71	4.04/4.34	1.95/2.32	1.48/1.69	
	WC	4.95/4.77	3.87/4.15	2.08/2.27	1.47/1.77	
SG III	EC	4.77/4.61	3.15/3.46			
	WC	4.84/4.68	2.95/2.77			
SG IV	EC	4.75/4.47	1.48/1.85			1.29/1.72
	WC	4.67/4.61	1.49/1.66			1.36/1.67

SG I = [T] related to the subject with intransitive verbs

SG II = [T] related to the subject with transitive verbs

SG III = [T] related to the direct object

SG IV = [T] related to the indirect object

POS A = [T] to the left of the NP modified

POS B = [T] between AUX and PP

POS C = [T] after PP but not in absolute final position

POS D = [T] after PP in absolute final position

POS E = [T] after PP but before the preposition related to IO

EC = Eastern Canada F=50 M=27

WC = Western Canada F=62 M=22

Canadian males. This might suggest that the preposition used may also influence their judgments as to the naturalness of a particular position, but that remains to be examined by further research.

The French males and females were amazingly similar in their judgments for the fillers. There were virtually no differences at all. Although there were no other significant statistical differences between the Eastern Canadian males and females, it should be noted that the males ranked every filler as being more natural than did the females. This lends additional support to the notion that females are more conservative linguistically than males in their speech.

If CF is starting to allow the quantifier to move to positions that are viewed as unnatural by the French, then it would appear to be males who have started this trend, as they tend to be less careful in their speech and are more flexible as to the kinds of structures they will allow. It may be that for males, on the whole, as long as communication is not impeded, a given structure is passable.

IV. DISCUSSION

Subjects' attitudes about language, what is acceptable and what is not, is an interesting question, and certainly played an important role in this study. Ideally, if one wanted to find out how 'natural' or perhaps how frequent the structures were that deviate from the "norm", one would listen to the speech of native speakers and record their conversations. Unfortunately, if one used that method, it might be extremely difficult to get subjects to illicite the structures that one wished to examine. When given a questionnaire, such as the one used in this experiment, subjects automatically equated 'natural' with "grammatical", which was not what was being tested. Thus, there are problems with both types of experiments.

When some subjects were interviewed, after they had completed the questionnaire, they often said things like, "I'm not sure if this is 'right' or not." One person said that some of the tokens were quite "tricky" and that she really had to think about them. Some absolutely refused to fill out the questionnaire, because they were afraid that they, as individuals, were being tested and they didn't want to admit that they did not know the "correct" answer. Although it was explained that what was being sought was their own personal opinion and not necessarily what was 'right', some still tended to be somewhat cautious when making their decisions. Another subject made comments by certain tokens stating that it was incorrect, and that he would never say it like that, but he admitted that there were people who sometimes used those particular structures.

Some agreed to fill out the questionnaire, but preferred to remain anonymous. They did not want anyone to be able to say that they did not know how to speak properly, in which case, it was probably better that they did remain anonymous, because they were

then more relaxed when they gave their answers. Such responses may be slightly more reflective of how people actually speak. This attitude was particularly true for the Western Canadians who were extremely defensive when approached. They wanted to know why this study was being done, what I was looking for, and what I hoped to prove by all of this. They were afraid that I wanted to show that their French was 'inferior' to SF or even to the French spoken in Quebec. One French Canadian man from a taped interview (for another experiment), made the comment that when he had called a store in Quebec, they were surprised to learn that French was spoken in the West, and made a sarcastic remark to that effect. He also felt that they, (the Western Canadians) were a separate group from the Québécois. In the West, French speakers are so inundated by English, that many French Canadians have told me that they feel as if they are losing their French. They live in a predominantly English-speaking community, and apart from the French that they speak at home with their family, they hardly ever use it. Often when they study French in school, they are studying SF and not CF. Textbooks are based on SF, and many of the instructors are SF speakers. This is slowly changing at all levels of education. The province of Alberta, at least, is attempting to find and hire more native CF speakers so that students will not have to feel that their language is 'inferior' to that of other native French speakers. Despite the influence from SF for the Western Canadians, it is important to note that for this experiment, their responses were, in almost every case, the same as those for the French in Quebec, so that one could talk about the mobility of [T] for CF on the whole compared to SF, and not just the French in Quebec.

The French were obviously more linguistically secure about their answers, and many subjects chose only ones and fives with nothing in between. They judged a token as being either natural or unnatural. This may be another indication that they were thinking in terms of what they felt was right and what was wrong. One subject marked Position B for Syntactic Group I, where [T] was related to the subject with intransitive verbs and

placed between the auxiliary verb and the past participle, as 5 if one meant that it was "une forme d'insistance", and as a 4 if it was not. Actually, there were many subjects who preferred Position B to Position A for Syntactic Group I. This choice has perhaps become a question of stylistics or personal preference. Some would simply say that that particular structure sounded better to them, indicating that it is probably the form that they, personally, use the most often. This is only for Syntactic Group I.

It is generally accepted that a language user moves the quantifier out of its normal position to draw attention to it. A semantic notion is highlighted or emphasized by moving it to another position, and thus could be viewed as an apposition. As long as the placement of the quantifier does not impede the comprehension of the sentence, and simply draws attention to itself, then it should be viewed as 'acceptable', even if not completely natural.

One French subject stated that certain tokens were completely unnatural, because they did not mean anything , as in filler tokens (c) *Le café renverse [T]*. and (f) *C'est [T] elle qui a tué les lièvres*. If a sentence does not mean anything, then it obviously would receive a low naturalness rating, since the intention of most speech is to be understood and to communicate. It is interesting that for the two tokens mentioned above, some subjects found them incomprehensible, while others ranked them fairly high on the naturalness scale.

Another French subject sent back a corrected questionnaire. Some were marked as completely wrong, while for others he stated that a particular form was fine, but it would be better if it were rewritten another way. In each case, he rewrote the sentence so that the quantifier was in its normal position. Even for Position B where [T] was between the auxiliary verb and the past participle, he stated that it would be better if they were written with [T] to the left of the NP modified. He did not mark those as wrong, but simply 'better'.

In any case, this study demonstrates that the most natural place for the quantifier is in its "normal" position. Since movement would only occur for some stylistic purpose or personal preference, [T] loses naturalness when moved from its normal position. The further removed from its normal position, the less natural it becomes, thus 'distance' would seem to influence one's judgments.

Subsequent research by this experimenter investigated the frequency of [T] occurring out of its normal position using a concordance that was run for the word *tout*, and any of its other forms, from three texts by Michel Tremblay. Tremblay is noted for writing in a style which captures the way French Canadians in Quebec speak. Of the several hundred examples where [T] related to a full NP, there were only a few examples of [T] out of normal position. There were only two examples of [T] related to the subject and placed after a simple tense verb. [T] was never in absolute final position, and there were no examples with compound tense verbs. They were:

(20) Les mâles doivent tous être couchés.

(21) Les clients criaient toutes après elle.

We know that these two sentences would also be natural for SF speakers.

As for [T] related to the direct object, there were several examples of L-Tous (not only with verbs in passé composé, but also in the futur proche which consists of the present tense of the verb to go plus an infinitive). This would seem to confirm the notion that L-Tous is becoming more frequent in CF. Since Tremblay writes the way the Québécois speak, and since [T] is normally pronounced /tUt/ regardless of its function or position in the sentence, he often writes it as *toute*, but this does not necessarily represent the feminine singular form. As a result, some ambiguous structures were created. In some cases, it was difficult to determine whether [T] was meant as an adverb or whether it really was related to the NP. For example, a sentence like (22) could be interpreted as *Did you completely paint the house?*

(22) Avez-vous toute peinturé la maison?

Given that interpretation, [T] would be placed where it would be normally, that is as an adverb modifying a verb,[12] or if L-Tous took place, then the sentence would be translated as *Did you paint the whole house?* There were other examples that were not ambiguous, as in (23) and (24).

(23) Y' a toute sorti son répertoire.

(24) J'ai toute entendu ton concert.

In both of these sentences [T] would be determined as being related to the full object NP. L-Tous was also fairly common when it related to *ça* as in (25).

(25) J'ai toute lu ça.

L-Tous did not occur every time there was a full NP or *ça*, but it was frequent enough that one could assume that this is a growing trend in the French in Quebec. This same tendency was evident for CF in general in this study, as there were those subjects who found this type of construction completely natural, while others did not. One might presume that those Canadians who ranked this type of structure as a 1 on the naturalness scale were those who had been exposed to more SF, as it is clear that this is not a natural structure for the French.

In the concordance study, there were no examples of L-Tous when [T] was related to the indirect object, and as was shown in this study, the subjects did not find [T] between the auxiliary verb and the past participle to be natural when [T] was related to the indirect object. It would appear that L-Tous does take place for the direct object, but not for the indirect object, which contradicts Daoust-Blais and Lemieux-Niéger's claim. This may be due to the fact that there seem to be several areas in CF where the rules are being leveled or overgeneralized. The exceptions are beginning to conform to the general rule. For example, in SF object pronouns follow the verb in affirmative commands, but precede the verb in negative commands. In CF, there is a growing tendency for object

[12] A similar token was used in the questionnaire. *Ma mère a [T] peint la maison.* Some subjects said that if it were an adverb, it would be perfectly natural.

pronouns to follow a verb in the imperative whether affirmative or negative. This could be viewed as an overgeneralization of the rule for the placement of object pronouns in relation to verbs in the imperative. Since it is quite natural for [T] to occur between the auxiliary verb and the past participle when it relates to a full subject NP, and since L-Tous may occur with object pronouns, perhaps French Canadians have overgeneralized the rule to apply to the direct object whether it is a full NP or a pronoun. The leveling effect may be coming from two directions. This overgeneralization tendency would seem to be true regardless of age or education. It would appear that males are the instigators of this leveling effect, since they seem to be slightly more flexible concerning the position of [T].

This overgeneralization tendency has begun with the direct object, but has not yet been carried over to the indirect object. Perhaps this is because the indirect object has an overt marker, the preposition, which somehow tends to block the movement of [T].

Another example of [T] out of its normal position, taken from another source, is that of token (f) of the fillers, *C'est [T] elle qui a tué les lièvres*. This was taken from the French Canadian film Pris au collet. The actor who spoke this line portrayed a man in his fifties or sixties, and lived in a small town in Quebec. He enjoyed hunting and trapping rabbits with his daughter. He did not appear to have been educated beyond high school, if indeed that. It must be noted that when the means were compared for this particular token, the subjects from Eastern Canada gave this a significantly higher rating of naturalness than those from France or Western Canada, although the score was generally low (1.72), it does imply that this type of construction does exist, albeit infrequently.

Many of the characters in Tremblay's works are simple, working-class people. Some come from rural areas and most are not well educated. His writings seem to depict the speech and actions of 'ordinary' people. The character in Pris au collet is also representative of a rural, working-class man. This might imply that the speech patterns used in Tremblay's works and in the film typify the working-class whose education is limited to a high school diploma or less. This study showed that there were no significant differences

due to age or education. There were some subjects over 60 with only two or three years of schooling, as well as those with Master's or PhD degrees. If one looks at the results for the education factor for Syntactic Group III in Appendix B, it can be noted that for Position B, where L-Tous occurs related to the direct object, there is a steady decrease in naturalness as the education level increases (although there is no significant statistical difference). Those with less than a high school education ranked this position at the 3 level, while those with more than a bachelor of arts degree ranked it closer to the 2 level. This clearly indicates that this structure is less natural for those with a higher education, but still allows for the structure to be used (perhaps in very casual speech). It also indicates that these structures are quite typical for common people like those in Tremblay's plays and in the film previously mentioned.

V. CONCLUSIONS

The findings in this study show that French speakers, whether from France or Canada, find 'normal' position, that is [T] to the left of the NP to which it is related, to be the most natural position. This was true whether it was related to the subject or the object NP. R-Tous, either between the auxiliary verb and the past participle or after a simple tense verb is also considered to be a highly natural position, although not as natural as normal position. This would seem to be in keeping with grammar books, such as Grevisse, Hanse or Chevalier. R-Tous does appear to be more natural with intransitive verbs than with transitive verbs, and is also more natural with compound tense verbs than with simple tense verbs. This is true for all three subject groups.

The French are quite divided as to the naturalness of [T] after the past participle but not in absolute final position. Some find this construction perfectly natural while others do not. In this case, Kayne's hypothesis that [T] may occupy any 'adverbial' position would seem to account for this disagreement among subjects, since the rules about adverb placement are also quite flexible and changeable with many exceptions. Stylistics and personal preferences would seem to be the mediating factors. A study on the placement of different kinds of adverbs as to where people preferred to use them might clarify this point. Results from such a study could then be compared to the results found here to see if there was some consistency amongst subjects as to their placement of certain adverbs and the placement of the quantifier.

The French and French Canadians seem to disagree seriously on this point, as the French Canadians did not find [T] after the past participle but not in absolute final position very natural, which contradicts Daoust-Blais and Lemieux-Niéger's claim that

this particular structure is allowed in CF. It may be allowed, but it is quite rare, making it debatable as to whether this type of construction should be included in a description of [T] in CF.

This study does, however, support the claim that in CF, [T] is not allowed in absolute final position when the verb is in a compound tense. Although Kayne never stated that [T] could appear in absolute final position after a compound verb in SF, the results here would seem to place some restrictions on his, perhaps too general, rule that [T] may occupy the same positions as an 'adverbial'. It is clear that the rule is too general for other reasons, as well. It must be noted that the transitivity of the verb may play an important role in influencing subjects' usage of R-Tous, as R-Tous seems to be far more natural, especially for Position B (for all three subject groups), when the sentence contains an intransitive verb than when it contains a transitive verb.

The transitivity of the verb may also play an important role in CF, because if both the subject NP and the object NP were the same number and gender, this would potentially create an ambiguous structure. This is further complicated by the fact that there is no distinction in pronunciation between any of the forms; masculine, feminine, singular or plural. Supposedly, the context would clarify any ambiguity that may be created. The frequency and the difficulties in the processing of ambiguous structures is another area that needs further investigation. This ambiguity could not occur in SF as L-Tous is not allowed with full object NPs.

Semantics cannot be ignored either when testing the syntax of a particular structure, as with filler (c), which for most subjects had no meaning. It was apparent that they did not all judge the sentence strictly on the position of [T] (although that is what they were supposed to do). It would be interesting to know why this particular sentence was used as an example in Daoust-Blais and Lemieux-Niéger's grammar for [T], since semantically it appears incomprehensible. This was generally true for both SF and CF speakers.

It is also clear that for all three subject groups when R-Tous occurs in a sentence, the further removed the quantifier is from its normal position, the less natural it becomes. This indicates that all movements of [T] to the right are not equally acceptable. Some are more favorable than others. Neither Kayne nor Daoust-Blais and Lemieux-Niéger account for this steady decline in naturalness. The implications are that the various constructions are equally acceptable, which is not the case, as this study demonstrates.

As for L-Tous when related to a full object NP, this study shows that this is not possible in SF, thus offering empirical evidence to support Kayne and others. It also shows that the French are not moving towards an acceptance of L-Tous for full object NPs either, although Daoust-Blais and Lemieux-Niéger have suggested that this structure is at least possible in popular speech.[13] The findings in this study clearly indicate that this is another area where the French and Canadians differ. L-Tous related to the direct object, at the moment, is slightly more natural for Eastern French Canadians than for those from the West, but western francophones are definitely moving in that direction. It must be noted that speakers are still quite divided as to how they view the naturalness of this position, since their answers ranged from 1 to 5. Those who ranked it as a 1 may have been influenced by SF and thus chose a more "grammatically" correct response. Nonetheless, this implies that this structure is in a period of transition and will probably eventually become as natural as Position B when related to the subject NP.

This study then supports L-Tous as described in Daoust-Blais and Lemieux-Niéger's grammar, but only when [T] is related to the direct object. It does not support the claims made for L-Tous related to the indirect object. They make no distinctions between the

---

[13]Daoust-Blais and Lemieux-Niéger use the following example of L-Tous in their grammar.
e.g. *Il a tous mangé les gâteaux.
They then state, "Les exemples du français standard que nous citerons dans ce texte sont ceux communément admis par Kayne, Pollock (1978) et Quicoli (1977); ils font référence à un niveau formel. Il existe en effet de nombreuses divergences en ce qui concerne la langue parlée en France, et le comportement de *tous* en français du Québec est peut-être moins marginal qu'il le paraît à première vue." This implies that L-Tous is occurring in popular speech in France, but such are clearly not the findings in this study.

two types of object NPs to which [T] is related, and yet the subjects in this experiment found Position B when [T] was related to the indirect object extremely unnatural. Daoust-Blais and Lemieux-Niéger also claim that it is possible in Position B but not in Position E with compound verbs, and yet there was no difference between the two positions for either Canadian group. Thus, their grammar does not seem to describe accurately a structure that is being used today by native French Canadian speakers.

The fillers (d) and (e) refute their claim that Position E is possible with simple tense verbs, as these tokens were also ranked quite low. Although there is a slight increasing trend toward this position by males, females do not appear to find this structure natural.

VI. SUMMARY

Although statistically the French differ from the French Canadians on certain points, the areas that are really important are the ones where there is a major discrepancy between the means of the two groups, that is their scores would fall into a completely different level on the naturalness scale. From this point of view then, there are only two areas where the French and the French Canadians differ.

(1) Position C for Syntactic Group I, that is [T] related to the subject and after a past participle but not in absolute final positon after an intransitive verb. It is the French who find this position more natural than the French Canadians.

(2) Position B for Syntactic Group III where [T] is related to the direct object and has been moved leftward between the auxiliary verb and the past participle. In this case, it is the French Canadians who find this position more natural than the French.

For the fillers, there appear to be two areas where the French and the French Canadians seem to differ drastically.

(1) For token (b) where [T] was placed after a simple tense transitive verb. The French found this structure much more natural than the French Canadians.

(2) L-Tous when related to the direct object with a compound verb plus an infinitive, as in token (h) which is consistent with the findings for Syntactic Group III. Thus, the French Canadians find this structure more natural than the French.

These are the only areas where the French and the French Canadians seem to differ seriously. As for those areas where Kayne and Daoust-Blais and Lemieux-Niéger's studies seem to differ from the findings in this experiment, it can be stated that:

(1) Kayne's statement that [T] may act as an "adverbial" seems too general, and fails to account for the fact that [T] in absolute final position after a compound verb is not a natural position for native speakers of French.

(2) Kayne also does not account for the fact that the transitivity of the verb seems to play an important role in R-Tous.

(3) As for CF, [T] after a compound verb, but not in absolute final position is not considered to be very natural.

(4) L-Tous may occur with direct objects, but is not natural with indirect objects.

There are still many areas concerning the movement of [T] that remain to be elaborated through further investigation. L-Tous of [T] related to the indirect object with simple tense verbs is such an area. In fact, more research should be done using simple tense verbs in general. A study comparing the singular and plural forms for the syntactic areas already examined, and the gender factor should be explored more fully. An investigation of ambiguity in CF would be interesting, as well as [T] related to pronouns and not just full NPs. Finally, the movement of [T] from one clause to another is an open area of research.

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APPENDIX A

QUESTIONNAIRE TEST 1

NOM:_____ AGE:_____

EDUCATION:_____

NATIONALITE:_____

REGION OU PROVINCE:_____

INSTRUCTIONS

Dans les phrases suivantes, vous trouverez un [T] qui représente une forme du mot tout (tout, toute, tous, toutes) et qui se rattache au nom souligné. Lisez chaque phrase soigneusement et décidez si le mot tout s'y trouve dans une position que vous considérez naturelle. C'est-à-dire, est-ce que vous l'employez normalement dans cette position ou est-ce une structure qui ne vous semble pas naturelle; vous ne le diriez jamais comme ça?

Utilisez les classifications suivantes pour faire vos jugements:

5 = la position la plus naturelle; vous le diriez normalement comme ça
4 = commun, mais pas aussi naturel que 5
3 = pas capable de décider; on l'entend parfois
2 = pas très naturel; rarement entendu
1 = pas du tout naturel; jamais employé

Mettez un cercle autour du numéro qui correspond à votre jugement. Jugez chaque phrase séparément et ne la comparez pas avec les autres.

STIMULI SET

1. [T] les garçons sont partis à la guerre.

   1 2 3 4 5

2. Les voisins viendront [T] ce soir.

   1 2 3 4 5

3. Ses amies sont arrivées [T].

   1 2 3 4 5

4. Les enfants ont [T] mangé des bananes.

   1 2 3 4 5

5. Il a [T] acheté ses meubles à crédit.

   1 2 3 4 5

6. Les étudiantes ont bu [T] du lait.

   1 2 3 4 5

7. Il a souri à [T] les petites filles.

   1 2 3 4 5

8. Les garçons sont [T] partis à la guerre.

   1 2 3 4 5

9. Les spectateurs ont regardé [T] le film.

   1 2 3 4 5

10. C'est [T] elle qui a tué les lièvres.

    1 2 3 4 5

11. Les femmes ont lu [T].

    1 2 3 4 5

12. Mes amis sont venus [T] chez moi.

    1 2 3 4 5

13. Elle a [T] réfléchi à son affaire.

1 2 3 4 5

14. [T] les enfants ont mangé des bananes.

1 2 3 4 5

15. Ses sœurs sont sorties [T].

1 2 3 4 5

16. J'ai parlé de [T] ça.

1 2 3 4 5

17. Les jeunes gens ont [T] dansé le rock.

1 2 3 4 5

18. J'ai songé [T] à mes amis.

1 2 3 4 5

19. [T] les étudiantes ont bu du lait.

1 2 3 4 5

20. Les femmes ont lu [T] ces livres.

1 2 3 4 5

21. Ma mère a [T] peint la maison.

1 2 3 4 5

22. Le café renverse [T].

1 2 3 4 5

23. [T] ses sœurs sont sorties hier soir.

1 2 3 4 5

24. Ses amies sont [T] arrivées à huit heures.

1 2 3 4 5

25. J'ai parlé [T] de ça.

1 2 3 4 5

26. Il a acheté [T] ses meubles à crédit.

1 2 3 4 5

27. Il a [T] souri aux petites filles.

1 2 3 4 5

28. Mes amis sont venus [T].

1 2 3 4 5

29. Je pense [T] à mon affaire.

1 2 3 4 5

30. Les femmes ont [T] lu ces livres.

1 2 3 4 5

31. Le chien a [T] mangé les tartes.

1 2 3 4 5

32. J'ai songé à [T] mes amis.

1 2 3 4 5

33. Les jeunes gens ont dansé [T] le rock.

1 2 3 4 5

34. Ses amies sont arrivées [T] à huit heures.

1 2 3 4 5

35. Les filles aiment [T] cet acteur.

1 2 3 4 5

36. Les étudiantes ont bu [T].

1 2 3 4 5

37. [T] mes amis sont venus chez moi.

1 2 3 4 5

38. Elle a réfléchi [T] à son affaire.

1 2 3 4 5

39. Les garçons sont partis [T] à la guerre.

1 2 3 4 5

40. Les jeunes gens ont dansé [T].

1 2 3 4 5

41. J'ai [T] songé à mes amis.

1 2 3 4 5

42. [T] les femmes ont lu ces livres.

1 2 3 4 5

43. Ma mère a peint [T] la maison.

1 2 3 4 5

44. Il se souvient [T] de ses petites amies.

1 2 3 4 5

45. Ses sœurs sont [T] sorties hier soir.

1 2 3 4 5

46. Les enfants ont mangé [T] des bananes.

1 2 3 4 5

47. Les étudiantes ont [T] bu du lait.

1 2 3 4 5

48. J'ai [T] parlé de ça.

1 2 3 4 5

49. [T] les jeunes gens ont dansé le rock.

1 2 3 4 5

50. Ses sœurs sont sorties [T] hier soir.

1 2 3 4 5

51. Les garçons sont partis [T].

1 2 3 4 5

52. Les garçons qu'elle a [T] connus sont morts.

1 2 3 4 5

53. [T] ses amies sont arrivées à huit heures.

1 2 3 4 5

54. Mes amis sont [T] venus chez moi.

1 2 3 4 5

55. Elle a réfléchi à [T] son affaire.

1 2 3 4 5

56. Les enfants ont mangé [T].

1 2 3 4 5

57. Les spectateurs ont [T] regardé le film.

1 2 3 4 5

58. Le chien a mangé [T] les tartes.

1 2 3 4 5

59. Il a souri [T] aux petites filles.

1 2 3 4 5

60. La maîtresse a [T] laissé les enfants sortir.

1 2 3 4 5

APPENDIX B

EDUCATION FACTOR FOR THE FRENCH

SYNTACTIC GROUP I

#	EDUCATION	A	B	C	D
38	1. BAC-	4.96	4.56	3.10	1.59
16	2. BAC	4.84	4.56	3.02	1.81
50	3. BAC+	4.92	4.70	2.75	1.79

SYNTACTIC GROUP II

#	EDUCATION	A	B	C	D
38	1. BAC-	4.99	4.04	2.47	1.80
16	2. BAC	4.89	4.05	2.30	1.73
50	3. BAC+	4.93	4.32	2.10	1.76

BAC- = Subjects without a baccalaureat.
BAC = Subjects with a baccalaureat.
BAC+ = Subjects with more than a baccalaureat.

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos C = [T] after the PP but not in absolute final position.
Pos D = [T] in absolute final position.

EDUCATION FACTOR FOR THE FRENCH

SYNTACTIC GROUP III

#	EDUCATION	A	B
38	1. BAC-	4.90	1.62
16	2. BAC	4.84	1.64
50	3. BAC+	4.90	1.59

SYNTACTIC GROUP IV

#	EDUCATION	A	B	E
38	1. BAC-	4.90	1.20	1.41
16	2. BAC	4.92	1.08	1.28
50	3. BAC+	4.93	1.10	1.18

BAC- = Subjects without a baccalaureat.
BAC = Subjects with a baccalaureat.
BAC+ = Subjects with more than a baccalaureat.

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos E = [T] after the PP but before the preposition related to the indirect object.

EDUCATION FACTOR FOR THE FRENCH

FILLERS

#	EDUCATION	2	10	22	29
38	1. BAC-	4.18	1.05	1.00	1.66
16	2. BAC	4.13	1.00	1.25	1.63
50	3. BAC+	4.48	1.02	1.16	1.24

#	EDUCATION	35	44	52	60
38	1. BAC-	3.76	1.42	2.05	1.13
16	2. BAC	4.06	1.31	1.88	1.25
50	3. BAC+	3.70	1.08	1.82	1.24

BAC- = Subjects without a baccalaureat.
BAC = Subjects with a baccalaureat.
BAC+ = Subjects with more than a baccalaureat.

2. Les voisins viendront [T] ce soir.
10. C'est [T] elle qui a tué les lièvres.
22. Le café renverse [T].
29. Je pense [T] à mon affaire.
35. Les filles aiment [T] cet acteur.
44. Il se souvient [T] de ses petites amies.
52. Les garçons qu'elle a [T] connus sont morts.
60. La maîtresse a [T] laissé les enfants sortir.

EDUCATION FACTOR FOR THE CANADIANS

SYNTACTIC GROUP I

#	EDUCATION	A	B	C	D
18	1. H.S.-	4.85	4.28	1.86	1.22
29	2. H.S.	4.75	4.28	1.94	1.29
62	3. H.S.+	4.82	4.40	1.94	1.26
42	4. B.A.	4.80	4.60	1.92	1.66
13	5. B.A.+	4.96	4.39	1.83	1.56

SYNTACTIC GROUP II

#	EDUCATION	A	B	C	D
18	1. H.S.-	4.92	3.67	2.14	1.39
29	2. H.S.	4.82	4.11	2.10	1.56
62	3. H.S.+	4.86	4.18	2.27	1.58
42	4. B.A.	4.90	3.99	2.06	1.61
13	5. B.A.+	4.98	3.83	1.42	1.40

H.S.- = Subjects without a high school diploma.
H.S. = Subjects with a high school diploma.
H.S.+ = Subjects with more than a high school diploma.
B.A. = Subjects with an undergraduate degree.
B.A.+ = Subjects with more than an undergraduate degree.

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos C = [T] after the PP but not in absolute final position.
Pos D = [T] in absolute final position.

EDUCATION FACTOR FOR THE CANADIANS

SYNTACTIC GROUP III

#	EDUCATION	A	B
18	1. H.S.-	4.61	3.25
29	2. H.S.	4.67	3.13
62	3. H.S.+	4.79	3.25
42	4. B.A.	4.79	2.92
13	5. B.A.+	4.90	2.27

SYNTACTIC GROUP IV

#	EDUCATION	A	B	E
18	1. H.S.-	4.74	1.79	1.38
29	2. H.S.	4.59	1.77	1.58
62	3. H.S.+	4.66	1.54	1.43
42	4. B.A.	4.58	1.43	1.44
13	5. B.A.+	4.89	1.40	1.15

H.S.- = Subjects without a high school diploma.
H.S. = Subjects with a high school diploma.
H.S.+ = Subjects with more than a high school diploma.
B.A. = Subjects with an undergraduate degree.
B.A.+ = Subjects with more than an undergraduate degree.

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos E = [T] after the PP but before the preposition related to the indirect object.

EDUCATION FACTOR FOR THE CANADIANS

FILLERS

#	EDUCATION	2	10	22	29
18	1. H.S.-	3.78	1.72	1.78	1.94
29	2. H.S.	3.59	1.45	1.86	1.69
62	3. H.S.+	3.94	1.65	1.74	1.68
42	4. B.A.	3.91	1.48	1.33	1.57
13	5. B.A.+	4.23	1.23	1.15	1.77

#	EDUCATION	35	44	52	60
18	1. H.S.-	2.57	1.83	1.56	2.22
29	2. H.S.	3.28	2.17	2.31	2.45
62	3. H.S.+	3.24	1.81	1.97	2.42
42	4. B.A.	2.74	1.36	1.60	1.83
13	5. B.A.+	2.31	1.23	1.54	1.62

H.S.- = Subjects without a high school diploma.
H.S. = Subjects with a high school diploma.
H.S.+ = Subjects with more than a high school diploma.
B.A. = Subjects with an undergraduate degree.
B.A.+ = Subjects with more than an undergraduate degree.

2. Les voisins viendront [T] ce soir.
10. C'est [T] elle qui a tué les lièvres.
22. Le café renverse [T].
29. Je pense [T] à mon affaire.
35. Les filles aiment [T] cet acteur.
44. Il se souvient [T] de ses petites amies.
52. Les garçons qu'elle a [T] connus sont morts.
60. La maîtresse a [T] laissé les enfants sortir.

APPENDIX C

AGE FACTOR FOR THE FRENCH

SYNTACTIC GROUP I

#	AGE	A	B	C	D
14	1. 0-20	5.00	4.50	3.07	1.70
24	2. 21-25	4.90	4.76	2.74	1.56
11	3. 26-30	4.98	4.61	2.70	1.52
18	4. 31-35	4.86	4.81	2.74	1.79
13	5. 36-40	4.94	4.46	3.23	1.85
9	6. 41-49	4.83	4.44	2.64	1.67
15	7. 50+	4.97	4.57	3.33	1.97

SYNTACTIC GROUP II

#	AGE	A	B	C	D
14	1. 0-20	4.98	3.96	2.71	1.84
24	2. 21-25	4.95	4.32	1.96	1.52
11	3. 26-30	4.93	4.11	2.14	1.59
18	4. 31-35	4.89	4.43	2.22	1.89
13	5. 36-40	5.00	4.02	2.42	1.85
9	6. 41-49	4.83	4.11	2.33	1.97
15	7. 50+	5.00	4.05	2.30	1.92

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos C = [T] after the PP but not in absolute final position.
Pos D = [T] in absolute final position.

AGE FACTOR FOR THE FRENCH

SYNTACTIC GROUP III

#	AGE	A	B
14	1. 0-20	4.93	1.93
24	2. 21-25	4.89	1.45
11	3. 26-30	4.86	1.39
18	4. 31-35	4.90	1.54
13	5. 36-40	4.79	1.67
9	6. 41-49	4.92	1.89
15	7. 50+	4.95	1.57

SYNTACTIC GROUP IV

#	AGE	A	B	E
14	1. 0-20	4.82	1.25	1.43
24	2. 21-25	4.96	1.04	1.09
11	3. 26-30	4.98	1.23	1.45
18	4. 31-35	4.92	1.15	1.35
13	5. 36-40	4.87	1.12	1.02
9	6. 41-49	4.89	1.06	1.25
15	7. 50+	4.95	1.13	1.45

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos E = [T] after the PP but before the preposition related to the indirect object.

AGE FACTOR FOR THE FRENCH

FILLERS

#	AGE	2	10	22	29
14	1. 0-20	4.21	1.00	1.00	1.57
24	2. 21-25	4.38	1.04	1.21	1.38
11	3. 26-30	4.00	1.00	1.00	1.91
18	4. 31-35	4.39	1.00	1.28	1.39
13	5. 36-40	4.31	1.15	1.00	1.00
9	6. 41-49	4.00	1.00	1.22	1.33
15	7. 50+	4.67	1.00	1.00	1.67

#	AGE	35	44	52	60
14	1. 0-20	3.64	1.71	2.21	1.21
24	2. 21-25	3.88	1.29	1.83	1.25
11	3. 26-30	3.91	1.00	1.64	1.18
18	4. 31-35	3.78	1.22	2.33	1.06
13	5. 36-40	4.00	1.08	1.69	1.08
9	6. 41-49	3.33	1.11	1.33	1.22
15	7. 50+	3.73	1.13	2.00	1.00

2. Les voisins viendront [T] ce soir.
10. C'est [T] elle qui a tué les lièvres.
22. Le café renverse [T].
29. Je pense [T] à mon affaire.
35. Les filles aiment [T] cet acteur.
44. Il se souvient [T] de ses petites amies.
52. Les garçons qu'elle a [T] connus sont morts.
60. La maîtresse a [T] laissé les enfants sortir.

AGE FACTOR FOR THE CANADIANS

SYNTACTIC GROUP I

#	AGE	A	B	C	D
14	1. 0-20	4.75	4.30	1.73	1.34
48	2. 21-25	4.74	4.54	1.98	1.39
26	3. 26-30	4.76	4.29	1.70	1.09
14	4. 31-35	4.89	4.07	1.66	1.13
15	5. 36-40	4.92	4.42	2.30	1.38
10	6. 41-49	4.83	4.38	1.65	1.28
37	7. 50+	4.89	4.52	2.01	1.37

SYNTACTIC GROUP II

#	AGE	A	B	C	D
14	1. 0-20	4.70	3.71	2.00	1.57
48	2. 21-25	4.84	4.22	2.31	1.67
26	3. 26-30	4.84	3.88	1.68	1.28
14	4. 31-35	4.95	3.82	1.89	1.73
15	5. 36-40	4.97	4.15	2.28	1.48
10	6. 41-49	4.95	3.88	1.83	1.78
37	7. 50+	4.93	4.11	2.26	1.48

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos C = [T] after the PP but not in absolute final position.
Pos D = [T] in absolute final position.

AGE FACTOR FOR THE CANADIANS

SYNTACTIC GROUP III

#	AGE	A	B
14	1. 0-20	4.54	2.71
48	2. 21-25	4.67	3.37
26	3. 26-30	4.87	3.16
14	4. 31-35	4.73	3.09
15	5. 36-40	4.88	2.83
10	6. 41-49	4.75	2.65
37	7. 50+	4.85	3.00

SYNTACTIC GROUP IV

#	AGE	A	B	E
14	1. 0-20	4.64	1.66	1.52
48	2. 21-25	4.55	1.86	1.53
26	3. 26-30	4.72	1.39	1.21
14	4. 31-35	4.52	1.32	1.59
15	5. 36-40	4.65	1.27	1.42
10	6. 41-49	4.60	1.35	1.10
37	7. 50+	4.80	1.55	1.47

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos E = [T] after the PP but before the preposition related to the indirect object.

AGE FACTOR FOR THE CANADIANS

FILLERS

#	AGE	2	10	22	29
14	1. 0-20	4.07	1.29	1.29	1.71
48	2. 21-25	4.02	1.73	1.71	1.63
26	3. 26-30	3.50	1.39	1.65	1.58
14	4. 31-35	3.14	1.57	1.43	1.64
15	5. 36-40	4.13	1.33	1.93	1.60
10	6. 41-49	3.90	1.20	1.20	1.50
37	7. 50+	4.11	1.68	1.65	1.95

#	AGE	35	44	52	60
14	1. 0-20	3.21	1.71	2.07	1.86
48	2. 21-25	3.21	1.71	2.13	2.42
26	3. 26-30	2.43	1.39	1.54	2.39
14	4. 31-35	2.29	2.14	1.86	1.79
15	5. 36-40	3.73	1.73	1.53	1.73
10	6. 41-49	2.70	1.50	1.40	1.80
37	7. 50+	2.97	1.84	1.89	2.32

2. Les voisins viendront [T] ce soir.
10. C'est [T] elle qui a tué les lièvres.
22. Le café renverse [T].
29. Je pense [T] à mon affaire.
35. Les filles aiment [T] cet acteur.
44. Il se souvient [T] de ses petites amies.
52. Les garçons qu'elle a [T] connus sont morts.
60. La maîtresse a [T] laissé les enfants sortir.

APPENDIX D

REGION FACTOR FOR THE FRENCH

SYNTACTIC GROUP I

#	REGION	A	B	C	D
19	1. Paris	4.87	4.72	2.83	1.64
6	2. Bretagne	5.00	4.21	2.58	1.71
14	3. Misc.	4.96	4.70	2.52	1.75
5	4. Charentes	4.95	4.70	2.35	1.90
11	5. Anjou	4.93	4.45	2.80	1.64
11	6. Nord	4.91	4.66	3.23	1.84
38	7. Bordeaux	4.92	4.64	3.18	1.71

SYNTACTIC GROUP II

#	REGION	A	B	C	D
19	1. Paris	4.91	4.36	2.49	1.88
6	2. Bretagne	5.00	3.71	1.96	1.83
14	3. Misc.	5.00	4.20	1.77	1.59
5	4. Charentes	5.00	3.75	1.50	1.40
11	5. Anjou	4.93	4.14	1.75	1.39
11	6. Nord	4.89	4.25	2.39	1.98
38	7. Bordeaux	4.95	4.20	2.60	1.88

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos C = [T] after the PP but not in absolute final position.
Pos D = [T] in absolute final position.

REGION FACTOR FOR THE FRENCH

SYNTACTIC GROUP III

#	REGION	A	B
19	1. Paris	4.78	1.92
6	2. Bretagne	4.96	1.71
14	3. Misc.	4.96	1.41
5	4. Charentes	4.80	1.40
11	5. Anjou	4.89	1.73
11	6. Nord	4.91	1.77
38	7. Bordeaux	4.95	1.47

SYNTACTIC GROUP IV

#	REGION	A	B	E
19	1. Paris	4.95	1.22	1.17
6	2. Bretagne	4.96	1.08	1.29
14	3. Misc.	5.00	1.1	1.18
5	4. Charentes	4.75	1.05	1.00
11	5. Anjou	4.82	1.07	1.27
11	6. Nord	4.95	1.05	1.25
38	7. Bordeaux	4.90	1.15	1.41

Pos A = [T] to the left of the NP it modifies.
Pos B = [T] between the AUX and the PP.
Pos E = [T] after the PP but before the preposition related to the indirect object.

REGION FACTOR FOR THE FRENCH

FILLERS

#	REGION	2	10	22	29
19	1. Paris	4.32	1.00	1.00	1.58
6	2. Bretagne	4.33	1.00	1.00	1.83
14	3. Misc.	4.29	1.07	1.29	1.21
5	4. Charentes	4.80	1.00	1.00	1.00
11	5. Anjou	4.46	1.00	1.00	1.18
11	6. Nord	4.36	1.00	1.27	1.36
38	7. Bordeaux	4.21	1.05	1.13	1.58

#	REGION	35	44	52	60
19	1. Paris	3.79	1.16	2.47	1.16
6	2. Bretagne	2.83	1.00	1.67	1.00
14	3. Misc.	3.57	1.07	2.00	1.29
5	4. Charentes	3.60	1.00	1.80	1.00
11	5. Anjou	3.64	1.09	1.91	1.00
11	6. Nord	4.46	1.55	1.73	1.18
38	7. Bordeaux	3.87	1.37	1.71	1.16

2. Les voisins viendront [T] ce soir.
10. C'est [T] elle qui a tué les lièvres.
22. Le café renverse [T].
29. Je pense [T] à mon affaire.
35. Les filles aiment [T] cet acteur.
44. Il se souvient [T] de ses petites amies.
52. Les garçons qu'elle a [T] connus sont morts.
60. La maîtresse a [T] laissé les enfants sortir.

APPENDIX E

GENDER FACTOR FOR FILLERS FOR ALL SUBJECT GROUPS

FILLERS

Subject Group	2	10	22	29
	F / M	F / M	F / M	F / M
1. French	4.35/4.41	1.00/1.04	1.09/1.11	1.44/1.50
2. Eastern Canada	3.90/3.92	1.62/1.89	1.56/1.96	1.56/1.82
3. Western Canada	3.87/3.86	1.44/1.27	1.55/1.59	1.71/1.82

Subject Group	35	44	52	60
	F / M	F / M	F / M	F / M
1. French	3.80/3.72	1.15/1.37	1.87/1.98	1.15/1.13
2. Eastern Canada	3.00/3.44	1.50/2.26	1.82/2.26	2.18/2.56
3. Western Canada	2.77/2.86	1.58/2.00	1.71/1.91	2.03/2.14

French	F=46 M=46
Eastern Canada	F=50 M=27
Western Canada	F=62 M=22

2. Les voisins viendront [T] ce soir.
10. C'est [T] elle qui a tué les lièvres.
22. Le café renverse [T].
29. Je pense [T] à mon affaire.
35. Les filles aiment [T] cet acteur.
44. Il se souvient [T] de ses petites amies.
52. Les garçons qu'elle a [T] connus sont morts.
60. La maîtresse a [T] laissé les enfants sortir.